

World Heritage Sites

Protected Areas and World Heritage



GIANT'S CAUSEWAY AND CAUSEWAY COAST UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

This iconic site at the foot of high cliffs on the coast of Northern Ireland is composed of some 40,000 massive and regular columns of black basalt, part of which forms a wide pavement of polygonal blocks leading into the sea. Geological studies of its lava flows over the last 300 years have greatly contributed to the analysis of Tertiary volcanic events in the North Atlantic.

COUNTRY

United Kingdom of Great Britain and Northern Ireland

NAME

Giant's Causeway and Causeway Coast

NATURAL WORLD HERITAGE SITE

1986: Inscribed on the World Heritage List under Natural Criteria vii and viii.

STATEMENT OF OUTSTANDING UNIVERSAL VALUE [pending]

IUCN MANAGEMENT CATEGORY

IV Habitat/Species Management Area

BIOGEOGRAPHICAL PROVINCE

British Isles (2.8.5)

GEOGRAPHICAL LOCATION

Lies on the north coast of Northern Ireland between Causeway Head and Benbane Head, 3 km north of Bushmills, County Antrim, at 55°14'28" N by 6°30'14" W. Irish Grid Reference C947 447.

DATE AND HISTORY OF ESTABLISHMENT

1961: 13 ha bequeathed by its owner Sir P. McNaghten to the National Trust; 57 ha of freehold and leasehold land were later bought with financing from the Ulster Land Fund;

1987: The Coast created a National Nature Reserve;

1989: The Antrim Coastline declared an Area of Outstanding Natural Beauty.

LAND TENURE

The National Trust which owns and manages the cliffs, foreshore and hotel manages the site as a whole with Moyle District Council which owns the car park and visitor centre. It is monitored by the Environment & Heritage Service of the Department of the Environment for Northern Ireland (EHS). Small sections of the cliff top path are the private property of a number of individuals.

AREA

71 ha. This includes the area of the car park, visitor facilities and hotel.

ALTITUDE

Sea-level to 100m.

PHYSICAL FEATURES

The site is five kilometers of the Causeway Coast between Causeway Head and Benbane Head, including the foreshore, cliffs, cliff-top path and the facilities at Causeway Head. The coastline comprises a series of 100m headland cliffs of regular columns of resistant lava with intervening bays. It forms the northern edge of a plateau which is farmed to the cliff edge. The Giant's Causeway itself is a sea-level promontory outcrop and pavement running out to sea. It is the ground level section of approximately 40,000 almost entirely regular polygonal columns averaging 45cm in diameter, formed by rapid cooling of extruded lavas. Other major features are the Giant's Organ of about sixty 12m-high regular columns, Chimney Tops, a number of columns separated from the cliffs by erosion, and Hamilton's Seat viewpoint on Benbane Head. Exposure of the columns in a pavement of such perfect horizontal sections is considered unique and is also scenically remarkable.

The Causeway Coast is an unparalleled display of geological formations, remnants of volcanic activity some 50-60 million years ago in the Tertiary period. The lavas of the Antrim Plateau cover some 3,800 sq. km, forming the largest remaining lava plateau in Europe. The cliffs along its edge are stepped due to a succession of five or six differentially eroded lava flows. These consist of Lower Basalts, where about six of eleven lava flows are 67m thick and are exposed between Plaiskin Head and Benbane Head; the Interbasaltic Beds which are extensively exposed along the cliffs east of Giant's Causeway; and the Middle Basalts, which are flows ranging from 30m to over 150m thick and form the cliffs on the site. The coastline is also cut through by olivine and tholeiite dykes, a good example of which can be seen at Roveran valley head (Wilson & Manning, 1978; DoE, 1985). Columnar basalts are also found dispersed among the islands of western Scotland; the columned cliffs of Staffa are well known. Only in the remote island of Canna are most of the features found together as in Antrim. Globally there are many occurrences of columnar basalt, some scenically spectacular mountains like the Devil's Tower in Wyoming or cliffs like the Devil's Postpile in central California. However, such occurrences are rarely as accessible, clear, various and geologically revealing of evolutionary history as the Giant's Causeway.

CLIMATE

The climate is dominated by mild damp westerly winds which bring an average annual rainfall of 1,016mm. The average December temperature is 4.4°C, the average July temperature is 14.4°C.

VEGETATION

Over 200 plant species representing a range of habitats covering seashore, cliff, scree, grassland, scrub, heathland and marsh are present. Localized species of note include red broomrape *Orobanche alba*, sea spleenwort *Asplenium marinum*, sea campion *Silene uniflora*, vernal squill *Scilla verna*, oyster plant *Mertensia maritima* and frog orchid *Coeloglossum viride* (National Trust, 1985 & 1992).

FAUNA

The site is regarded by the Royal Society for the Protection of Birds as one of regional importance within the United Kingdom based on the number of breeding species. Over 50 resident and 30 migrant species have been recorded and including, in the 1980s, one pair of breeding red-billed choughs *Pyrrhocorax pyrrhocorax* and peregrine falcons *Falco peregrinus*; also seen are eiderduck *Somateria mollissima*, buzzard *Buteo buteo*, fulmar *Fulmarus glacialis*, European storm petrel *Hydrobates pelagicus*, great cormorant *Phalacrocorax carbo*, shag *P. aristotelis*, guillemot *Uria aalge* and razorbill *Alca turda* (National Trust, 1985 & 1992). The Atlantic sturgeon *Acipenser sturio* (CR) might be found offshore.

CONSERVATION VALUE

The Causeway is a site of great international significance in the history of earth science and has been studied for over 300 years. The unique formation illustrates the geological activity of successive lava flows and interbasaltic beds. Studies of its lava flows have greatly contributed to the analysis of Tertiary volcanic events in the North Atlantic, and its unusual scenery is a major attraction to visitors. The coast lies within a WWF Global 200 Marine Eco-region.

CULTURAL HERITAGE

In Port-na-Spaniagh, below the isolated columns known as the Chimneys, is the site of the 1588 wreck of the Armada galleon *Girona*: the treasures and artifacts recovered from it by Robert Stenuit's team in 1967-69 form a major part of all known artefacts recovered from the Armada. They are conserved in the Ulster Museum, Belfast. The sub-littoral area is a protected nautical archaeological site. The Giant's Causeway featured in early geological controversies on the origins of basalt. Also in the 18th century, a myth emerged linking the Causeway and Staffa with a prehistoric hero Finn MacCool. This developed cultural significance outside Ireland with the popularity of the epics of Ossian (J. Macpherson) in the early Romantic movement when it became part of an international system of literary references (ICOMOS, 1985). Traditional well documented industries were kelp seaweed harvesting until the mid-20th century, and fishing (Watson, 1992).

LOCAL HUMAN POPULATION

The site is uninhabited now, although several small settlements exist immediately inland of the Causeway cliffs. In the 19th century, and up to the acquisition of the site in 1961 by the National Trust, many temporary commercial stalls and huts were either owned or managed by local people for tourists and visitors. A house occupied by a custodian appointed locally to oversee these activities was located next to the Giant's Causeway (DoE, pers. comm., 1995)

VISITORS AND VISITOR FACILITIES

The Causeway has been Northern Ireland's most popular tourist attraction for 300 years. It now draws over 400,000 visitors annually, over half from overseas (EHS, 2005). The site figured frequently in 19th century guidebooks especially after 1887, when the world's first hydro-electric tramway was extended to the Causeway. Two hotels and numerous guesthouses were built and until 1961 the area was heavily commercialised. Visitor facilities include car parks and a visitor centre at Causeway Head, which burned down in 2000 and is to be replaced by 2008. Public access to the coast is by a system of footpaths. The site is annually visited by geology students on field courses, and over 6,000 schoolchildren (DoE, 1985).

SCIENTIFIC RESEARCH AND FACILITIES

During the last 300 years, the site has been the object of intense study as evidenced by the wealth of scientific literature on it. It was first reported in 1693 and during the 18th century was central to the debate about the origins of igneous rocks. In 1771, Desmarest concluded the Causeway was a lava flow and in 1786, Hamilton produced the first detailed analysis. The work of Tomkeieff (1940) and Patterson (1955) provided descriptions, interpretations and the correct sequence of the lava flows. The former, notably, proposed descriptive terms for the Causeway jointing which have been internationally adopted for the description of columnar basalts. Biological surveys were carried out by the National Trust in 1985 and 1992.

MANAGEMENT

Most of the property is owned by the National Trust and preserved as inalienable land. 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), is also protected by its designation as an Area of Scientific Interest (ASI) and as an Area of Special Control (ASC). The site has been a national nature reserve since 1987, and negotiations continue with individual landowners concerning public access to parts of their properties. The agencies cooperating in its conservation and management are the National Trust, Moyle District

Council, and the Department of the Environment for Northern Ireland which provides scientific advice and liaison. A Management Plan for the causeway and coastal paths commissioned by the national Environment & Heritage Service in 2003 was submitted in 2005. This will provide background for all aspects of the environment, to be embodied as policies in a Draft Northern Area Plan. Visitor management is to come under the Tourism Masterplan for the Causeway Coast and North Antrim Glens published in 2004 by the Department of Enterprise, Trade & Investment (EHS, 2004; 2005).

The National Trust's management aims are to maintain the natural quality of the site; maintain public access by means of purchase and lease of property; maintain public footpaths and create new ones; remove, after negotiations with leases and owners, all unsightly buildings and intrusions on the landscape; the conservation of the fauna and flora and education of the public. The work includes the maintenance of 15 km of footpaths, which are continuously eroded and need constant work to remain safe, guide services, the provision of interpretative material and a minibus service for elderly and disabled visitors. A buffer zone and coastal moorings are being considered.

MANAGEMENT CONSTRAINTS

The columnar basalt formations of the Causeway are not easily damaged but in the 18th and 19th centuries, many stones were removed for ornamental use, and the zeolite and calcite crystals in the Lower Basalt, were removed in large quantities by visitors and were sold as souvenirs by guides. The potential damage by heavy visitation is kept under control.

STAFF

The National Trust employs approximately 12 staff on a permanent basis, and 15 more seasonally. In addition, there are some 10 volunteer guides (DoE, pers. comm., 1995).

BUDGET

The National Trust's recurring budget for the 1995-96 financial year was approximately £150,000. This included grant-aid for access and visitor management from the Department of the Environment and the European Union, also training and employment for Action for Community Employment workers from the Department of Economic Development. Additional grant-aid is available for land acquisition, access and nature conservation (Department of the Environment for Northern Ireland, pers. comm., 1995).

LOCAL ADDRESSES

National Trust, North Coast Office, 44, Causeway Road, Bushmills, County Antrim, BT57 8SU, N. Ireland.

Moyle District Council, Sheskburn House, 7 Mary Street, Ballycastle, County Antrim BT54 6QH, N. Ireland.

Environment & Heritage Service, Commonwealth House, 35, Castle Place, Belfast BT1 1GU, N. Ireland.

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The principal source for the above information was the original nomination for World Heritage status.

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DATE

1986. Updated 8-199, 11-2005, May 2011.