

PARK CODE

- Protect the Wildlife, plants and trees.
- Take all litter home.
- Ensure all dogs are kept on a lead, unless otherwise stated, and are not allowed to foul paths and mown grass.
- Guard against all risk of fire.
- Make no unnecessary noise.
- All outdoor pursuits must be permit-approved at reception in the Countryside Centre.
- The Coastal Zone contains some natural hazards. Watch your step and supervise children, especially near steep slopes, water and the beaches.
- Some walks can be strenuous and not all are suitable for wheelchairs, prams etc... Ask at reception in the Countryside Centre for more information.
- Some paths may be liable to flooding in severe weather.

Other EHS country parks and centres:

Redburn Country Park, Scrabo Country Park, Quoile Countryside Centre, Castle Archdale Country Park, Ness Country Park, Roe Valley Country Park and Crawfordsburn Country Park.

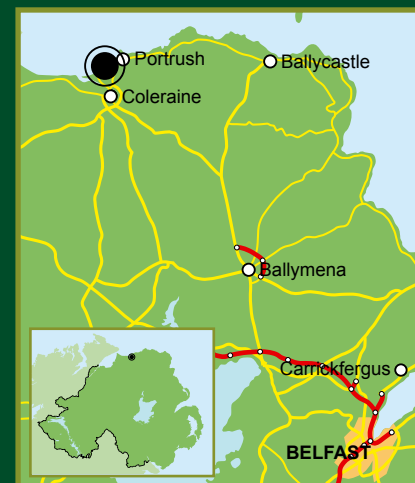
Portrush

Coastal Zone

For further information contact:

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Portrush Coastal Zone

Country Parks are designed to promote access to the countryside, encouraging a greater understanding and knowledge of the environment.

Portrush National Nature Reserve lies adjacent to the Countryside Centre and covers an area of approximately 0.8 hectares between Portamdoe Harbour and

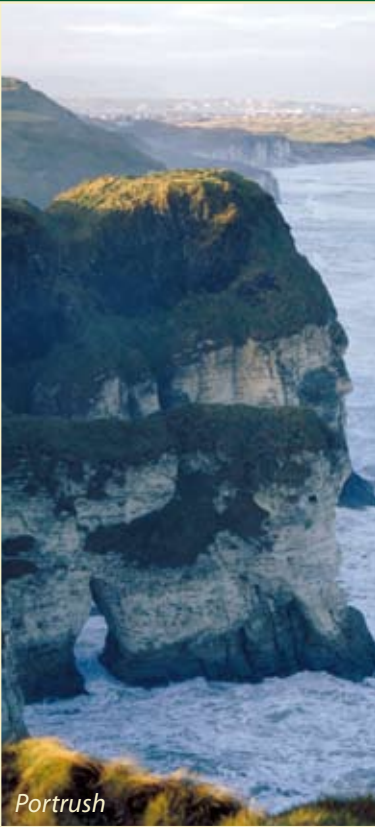
the Blue Pool. Access via Lower Lansdowne Road is unrestricted and parking is available.



The Reserve

The Portrush Nature Reserve is an important geological site containing some of the best-preserved exposures of altered shale, with recognisable fossil imprints. The shale was originally laid down as sediments of mud and silt on the bottom of an ancient sea during the Jurassic period some 200 million years ago. It was later compressed to form soft Lias rock.

Subsequent volcanic activity during the Tertiary period some 60 million years ago forced molten lava between the layers of shale, baking them into a hard splintery rock in a process known



as contact metamorphism. This altered (metamorphosed) rock is known as hornfels. It is a hard, fine-grained rock, which looks like basalt but contains the fossil remains of shellfish, mostly ammonites. This is the rock many refer to as the 'Portrush Rock'.

On cooling the lava formed another rock called dolerite which took the form of a massive saucer-shaped intrusion known as sill. The Portrush Sill now forms both the promontory of Ramore Head and extends west to include the Skerries offshore.

History

The rocks of Portrush have played a significant part in our understanding of earth's dynamic evolution and processes responsible. In the 18th century, when understanding of geology and geological processes was more limited, there was great



SITE MAP



KEY

-  Sea
-  Beach
-  Main Road
-  Visitor Centre
-  Carpark
-  Toilet Facilities

controversy over the origin of igneous rocks. One group of natural philosophers, the 'Neptunists', claimed that all such crystalline rocks were formed by sedimentary processes in the sea, an idea first proposed in 600BC.

This theory was challenged by the 'Vulcanist' school of thought, which considered these rocks to be the result of volcanic activity. However, the fact that fossils are located in the Portrush Rock became a major stumbling block

to Vulcanism. How could these rocks be volcanic in origin if they contained the remains of marine life? In the end, the Portrush Rock became one of the last pieces of evidence used by the Neptunists to support their theory.

The correct interpretation of the Portrush Rock involved a number of the greatest British geologists of the 18th and 19th centuries. Firstly, the Edinburgh cleric James Hutton showed that volcanic rock, in its molten state, could

force its way between layers of other rock, cooling to form an intrusive sill of dolerite. Secondly, James Playfair, in 1802, described a visit to Portrush where he correctly identified these 'basalts' as sedimentary rocks, which had undergone alteration and distinguished this baked shale from the adjoining and overlying igneous rock. Erosion over many millions of years has removed much of the dolerite and other rocks from above the Jurassic shale, forming the present-day shoreline and exposing many of the ammonite fossils embedded in the metamorphosed rock.

Wildlife

Many tidal rockpools are visible at low tide and visitors have the opportunity to explore these mini-ecosystems and investigate the diversity of life to be found there. These rockpools contain a wide range of plant and animal

species which are preyed upon by a host of fish, crustacean and bird species. Many of these species are represented in the marine tanks located in the Countryside Centre, including a ground-level rockpool tank laid out on the floor of the centre for easy viewing by small children.

Conservation

The site has suffered in the past from over-enthusiastic fossil collecting. To ensure that the features of interest are available to everyone, visitors are asked not to chip away the rock exposure, or remove samples from the reserve. Examples of the baked shale and its fossils are available for examination at Portrush Countryside Centre. A National Nature Reserve since 1970, the site was given further protection in 1996 when it was declared an ASSI.

Other Visitor Attractions