



An Agency within the Department of the
Environment
1996-2001-02-28



DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT PORTRUSH WEST STRAND, COUNTY ANTRIM. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

The Department of the Environment (the Department), having consulted the Council for Nature Conservation and the Countryside and being satisfied that the area delineated and described on the attached map (the area) is of special scientific interest by reason of the geological features and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as the 'Portrush West Strand Area of Special Scientific Interest'.

A bed of peat containing large fragments of wood, including the stumps and trunks of trees, is infrequently exposed on the West Strand beach at Portrush. The site is important in understanding and dating sea level changes on the north coast in the period since the last ice age. The lowest buried blown sands are potentially some of the earliest known Holocene (post-glacial) dunes in the British Isles.

The West Strand peat was first noted in 1888 but was not subjected to detailed analysis until 1949. Then plant pollen and fossil wood, together with the series of sands and peat, were described as part of the pioneering work on Irish environmental studies, undertaken by Professor Knud Jessen.

The peat developed on earlier (older than 7,310 years before present) low sand dunes as rising sea-level led to restricted drainage and waterlogging. Post 5,900 years BP, a beach developed on the peat.

The peat has been shown to change upwards from fen peat into *Phragmites* or Common Reed peat containing abundant fossil material, especially wood of Alder *Alnus sp.* and Birch *Betula sp.*

A borehole put down through the beach to the north of Castle Erin has produced evidence of an even older peat. The sediment series recorded, started in the lower dune sand, and included another, probably older, layer of peat underneath. This was underlain in turn by a series of sands and boulders before reaching the boulder clay left at the end of the last ice age. While no dates are available for these materials, they are clearly older than 7,310 BP.

SCHEDULE

The following operations and activities appear to the Department to be likely to damage the geological features of the area:

1. Any activity or operation which involves the damage or disturbance by any means of the surface and subsurface of the land, including reclamation and extraction of minerals, including rock, sand, gravel and peat, other than recreational activities
2. The storage or dumping, spreading or discharge of any material.
3. Construction, removal or disturbance of any permanent or temporary structure including building, engineering or other operations.
4. Alteration of natural or man-made features, the clearance of boulders or stones.
5. Operations or activities which would affect rivers or streams, e.g.
 - i) change in the methods or frequency of routine maintenance;
 - ii) modification to the structure of any watercourse.
6. The following activities undertaken in a manner likely to damage the interest of the area:
 - i) Educational activities;
 - ii) Research activities
 - iii) Recreational activities.
7. Sampling of rocks, minerals, fossils or any other material forming a part of the site, undertaken in a manner likely to damage the scientific interest.
8. Use of vehicles or craft likely to damage the geological features of the area.

FOOTNOTES

- (a) Please note that consent by the Department to any of the operations or activities listed in the Schedule does not constitute planning permission. Where required, planning permission must be applied for in the usual manner to the Department under Part IV of the Planning (Northern Ireland) Order 1991.
- (b) Also note that many of the operations and activities listed in the Schedule are capable of being carried out either on a large scale or in a very small way. While it is impossible to define exactly what is large and what is small, the Department would intend to approach each case in a common sense and

practical way. It is very unlikely that small scale operations would give rise for concern and if this was the case the Department would normally give consent, particularly if there is a long history of the operation being undertaken in that precise location.