

DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

**DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT
BELLANALECK, COUNTY FERMANAGH. ARTICLE 24 OF THE NATURE
CONSERVATION AND AMENITY LANDS (NORTHERN IRELAND) ORDER 1985.**

The Department of the Environment for Northern Ireland (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 its 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 'Bellanaleck area of special scientific interest'.

The Carboniferous rocks exposed in Bellanaleck Quarry are one of only two occurrences of Waulsortian mound limestones in Northern Ireland. They contain a diverse fossil fauna that includes, recorded for the first time in Northern Ireland, a suite of trilobites that are of late Tournaisian age, some 342 million years old (My).

The term Waulsortian refers to a submarine 'reef' formation with distinctive associated rock and fossil animal characters of a particular age, that being late Tournaisian to early Viséan.

The dominant rock is a fine-grained limestone which is riddled with laminated calcite crusts associated with large unbroken fronds of bryozoa. This assemblage is thought to represent the deepest environment in the development of the mound and is associated with bryozoa, together with crinoid debris and an abundant and diverse fauna of brachiopods, of which 19 species occur. Unfortunately this brachiopod assemblage is not fully diagnostic of age. The presence of trilobites is particularly noteworthy.

The age of the rocks has been estimated as no younger than the Arundian, 339 My, and no older than the base of the upper Tournaisian, 342 My. They are thus within the age range for the Waulsortian.

Rocks of this age are rare in Northern Ireland, as elsewhere there is good evidence of marine regression in these times and exposure of older Carboniferous sedimentary rocks and hence non-deposition in this area.

Despite the isolated nature of the limestone exposure here, the area is one of the most important geological localities in the Carboniferous outcrop of Northern Ireland. This occurrence of Waulsortian limestones is some 60km north of the limit formerly imposed on the development of this facies in Ireland, and is one of the two most northerly occurrences of the Waulsortian in Ireland, Great Britain and Western Europe. It is the only locality in Northern Ireland where an early Chadian age is proven.

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 ploughing, rotovating, harrowing, reclamation and extraction of minerals, including rock, sand, gravel and peat.
2. The storage or dumping, spreading or discharge of any material.
3. Changes in tree or woodland management, including afforestation, planting, clearing, selective felling and coppicing.
4. Construction, removal or disturbance of any permanent or temporary structure including building, engineering or other operations.
5. Alteration of natural or man-made features, the clearance of boulders or stones and grading of rock faces.
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 interest of the area.

Sealed with the Official Seal of the
Department of the Environment for
Northern Ireland on 28 MARCH 1996

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Civil Servant in Charge
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J. Crowther
Assistant Secretary

FOOTNOTES

- (a) Please note that consent by the Department to any of the above operations or activities 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 (NI) Order 1991. Operations or activities covered by planning permission are not normally covered in the list of Notifiable Operations.

- (b) Also note that many of the operations and activities listed above 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.