

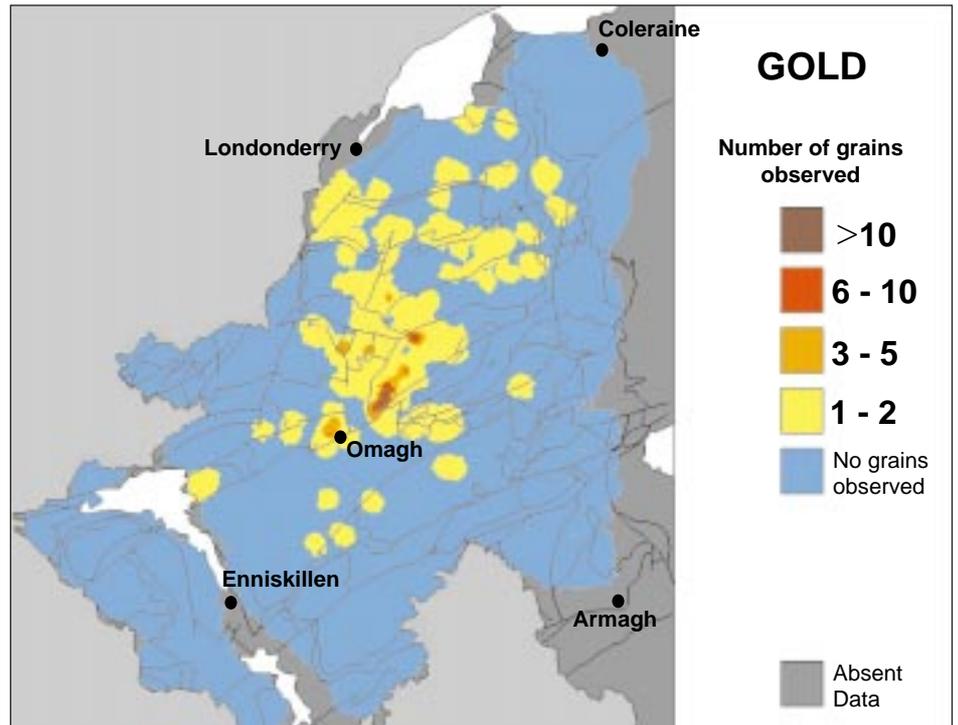


A prime target for exploration

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Minerals in Northern Ireland



Predicted distribution of gold from observations made in heavy-mineral concentrates.

The Geological Survey of Northern Ireland (GSNI), which is staffed by BGS employees, was established in 1947 and aims to assist the promotion of economic growth, especially in relation to minerals. It is an integral part of the Department of Economic Development and acts as technical advisor to the Minerals and Petroleum Unit who are responsible for licensing under the Mineral Development Act (NI) 1969.

There are currently 17 licences held for minerals, covering 20 per cent of Northern Ireland. They include the gold prospect at Cavanacaw, County Tyrone, owned by Omagh Minerals. Soil and deep overburden sampling have delineated a resource estimated at 2 million tonnes grading at 6.9 grams per tonne gold, for which planning permission has been granted. At Curraghinalt, County Tyrone, Ulster Minerals Ltd have a multi-vein prospect, discovered in 1983 as a result of prospecting a shallow soil arsenic anomaly. The resource totals 900 000 tonnes grading 11.66 grams per tonne gold.

Other licences for gold exploration have been issued to Billiton (UK) Resources BV in the Dalradian rocks of the Sperrin

Mountains, and to Conroy Diamonds and Gold plc in the Down-Longford massif.

In 1816 the Brookeborough diamond was discovered in County Fermanagh by a child looking for pebbles, and was mounted in Irish gold. More recently, licences to explore for diamonds have been issued to Poplar Resources Ltd over large areas in the west of the Province.

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Base metal mineralisation in the Clogher Valley is being searched for by Ivernia West plc, largely as a result of a mineral reconnaissance programme carried out in the area for GSNI. Industrial minerals are also important. In County Antrim, rock salt is mined at Kilroot, and bauxite at Clinty Quarry, while planning permission has been sought to exploit the sole UK source of perlite at Sandy Braes. Lignite occurs in three distinct areas: Ballymoney, County Antrim (licensed to Meeekatharra (NI) Ltd); at Crumlin, County Antrim (licensed to Antrim Coal

Co. Ltd) and in east County Tyrone. A total lignite resource of about 1 billion tonnes has been estimated.

The production of aggregates is important for the economy of Northern Ireland. In 1996, 259 operating quarries produced 25 million tonnes of rock, valued at £63 million, and employed 1460 people.

The GSNI has commissioned work to investigate the mineral potential of Northern Ireland. Work has included studies of industrial minerals in Cavan/Fermanagh (jointly with the Geological Survey of Ireland); characterisation of the alluvial gold in the Mourne Mountains; the gold metallogeny of north-west Northern Ireland, and the regional geochemistry of western Northern Ireland. A Geophysical Image Atlas has recently been published, with gravity and aeromagnetic anomaly images providing important insights into the structural elements of Northern Ireland.

Northern Ireland has a diverse geology and has great potential for a wide range of mineral deposits. This, taken with an efficient licensing regime, makes it a prime target for exploration.