

Geological Survey of Ireland



Highlights of 2006

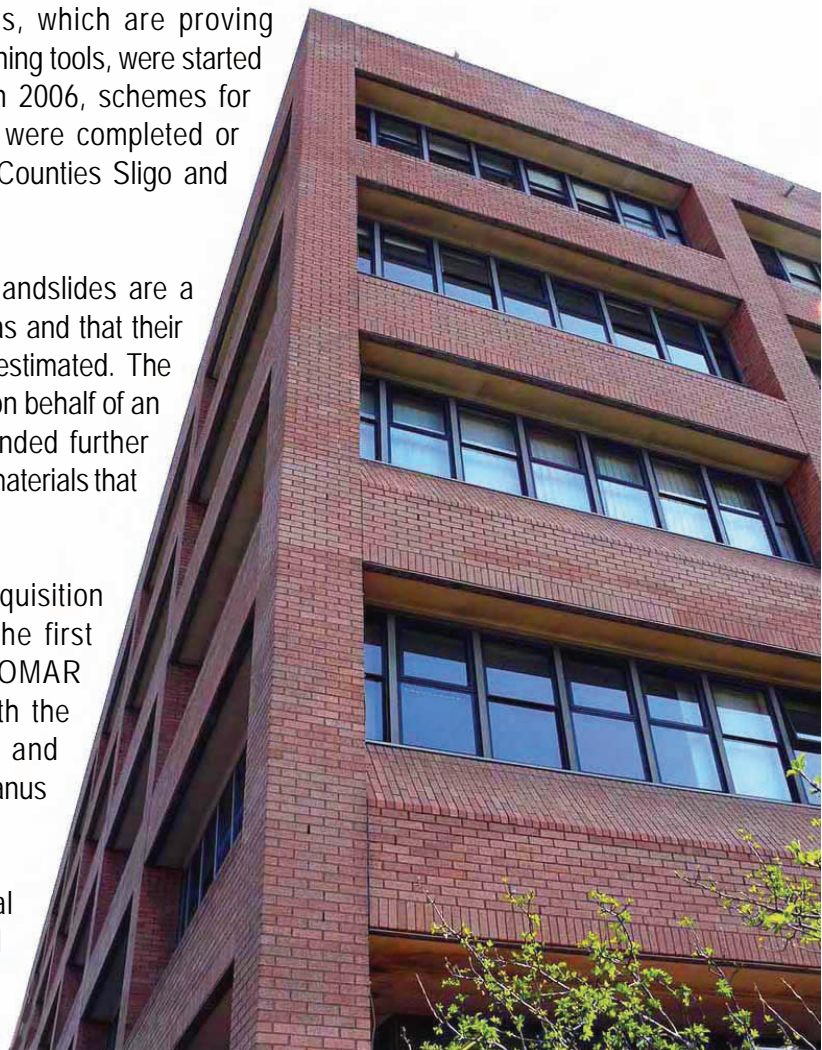
The Geological Survey of Ireland (GSI) mission is to support national and regional objectives through the provision of appropriate information and advice. The national relevance of geoscience was recognised in 2006 by its inclusion in the Government's Strategy for Science, Technology and Innovation. During 2006, the GSI, in cooperation with the Royal Irish Academy and the wider geoscience sector, advanced the work on the National Geoscience Programme 2007-2013. This important work is designed to facilitate the geoscience contribution and participation in the forthcoming National Development Plan.

Groundwater Protection Schemes, which are proving evermore important and topical planning tools, were started for Counties Cavan and Galway in 2006, schemes for Counties Donegal and Monaghan were completed or updated, and interim schemes for Counties Sligo and Westmeath were provided.

A report on landslides found that landslides are a significant hazard in our upland areas and that their incidence heretofore had been underestimated. The report, edited and published by GSI on behalf of an all-island working group, recommended further research to determine the areas and materials that are most susceptible.

Two new programmes of data acquisition commenced in 2006. Offshore the first surveying season of the INFOMAR Programme, undertaken jointly with the Marine Institute, employed ships and aircraft in and around Bantry, Dunmanus and Galway Bays.

Onshore trial airborne geophysical surveys, part of the integrated Resource and Environmental Survey of Ireland, targeted three areas,



Cavan-Monaghan-Leitrim, Silvermines and, Castleisland-Tralee. The results will assist in assessing areas for landfill and quarries in and in indicating the distribution of groundwater and potentially polluted zones in the first two areas and the distribution of potentially high indoor radon in the third.

Additional areas of work due for expansion or implementation include carbon sequestration in deep geological formations and aggregates potential mapping.

A key milestone in 2006 was the publication of the 1:500,000 Bedrock Geological Map of Ireland, prepared jointly with the Geological Survey of Northern Ireland (GSNI), and particularly noteworthy as it is the first ever produced on an agreed North-South basis. It was just one further element of the ongoing collaboration with GSNI, an important strategic partner, with whom GSI cooperated in the areas of landslides, groundwater studies, landscape tourism and mapping. Elsewhere, 1:50,000 scale Bedrock Sheet 77 was published and Sheet 51 was completed in draft. A combined Bedrock/Quaternary Map of Sheet 50 (Dublin) was progressed. In support of mapping, a total of 422 boreholes were completed, mainly shallow overburden holes averaging less than 6m deep, for an aggregate total depth of 3444m.

GSI provided important support to policy and regulation across a range of issues. In the case of both the Water Framework Directive and its offspring, the Groundwater Directive, GSI made pertinent inputs relating to groundwater and provided access to the GSI databases. GSI's Quaternary/Geotechnical Section dealt with 97 submissions (compared to 60 in 2005) relating to planning applications and environmental impact assessments, drawing particularly on GSI geotechnical and geological heritage databases.



At the end of 2006 consultants were being appointed to develop a conceptual management plan for the old minesite at Avoca, where GSI was also involved in a separate environmental and heritage study led by the Eastern Regional Fisheries Board. In cooperation with the Environmental Protection Agency and the Exploration and Mining Division (D/CMNR), another project was underway to characterise wastes at all historical mines nationwide,

Every effort is made to ensure that GSI databases are used to the maximum extent possible. New data acquisition for databases such as Geotechnical and Groundwater Boreholes led to increases of up to 20% by volume of records in some cases. Data is now

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made available free of charge for research and educational purposes, quicker access has been provided to the Document Management System, which is the foundation for many databases, and a catalogue of data (or metadata) has been created on a special multipartner website.

Landscape tourism was promoted with a variety of partners in the Breifne region (Cavan/Fermanagh/Leitrim/Roscommon/Sligo) and the Copper Coast Geopark (coastal County Waterford). EU project funding in each of these regions has been extended until mid-2008. Strategic training services have been provided in on-site waste water treatment, seabed classification and in-service training for geography teachers.

GSI continued to receive significant media coverage, especially relating to natural hazards e.g. landslides, flooding, groundwater contamination and the two new programmes of data acquisition. The number of website visitors increased significantly, up 64% compared to 2005, while the number of in-person queries from the public showed an anticipated fall of 10%. A National Committee to coordinate events for International Year of Planet Earth (2008) had started planning an interesting programme of events.

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