

# IRISH ASSOCIATION FOR QUATERNARY STUDIES

#### IQUA NEWSLETTER

October 1988.

Edited by Ronnie Creighton.

#### AN INTRODUCTION

This is the first edition of a re-vamped newsletter which will provide an outlet for short abstracts on current studies of whatever kind, academic or applied. It will also provide information on meetings, field trips, activities of members, publications, etc. IQUA is a small organisation involving research workers and others interested in a wide range of Quaternary subjects. It is much in need of expanding its membership base and it is hoped that the newsletter will be used by interested people to communicate their ideas or any news they may have on Quaternary-related matters within and without Ireland.

Contributions for this edition have been few, but I am sure many members have items of interest which they could tell us about in the next edition which will go out next spring. The Newsletter can only be sent to paid-up members of the Association, but hopefully you might persuade interested colleagues to join so that the membership can be expanded and thereby imcrease the potential contributions. It depends on you, the members!!

All contributions should be sent to me at the Geological Survey of Ireland, Beggars Bush, Haddington Road, Dublin 4. Tel. 01-609511.

Ronnie Creighton

# THE HISTORICAL CLIMATOLOGY OF FLOODING IN CORK CITY

Climatological hazards, their causes, impacts and recurrence intervals have recently been an object of increased interest. Effective analysis in this area requires the use of non-instrumental meteorological sources in order to increase the scope of the data base. Historical reconstructions of climate, providing detailed records of short-term variations are therefore required. A current research project attempts to reconstruct the historical climatology of flooding in Cork city, an area which has had continuous problems with this type of climatological hazard.

Background to this work required an extensive survey of historical literature including such diverse sources as meteorological chronologies, early Irish Annals, journals of local societies, old newspaper records, Cork Corporation and County Council documents, histories of Cork city, meteorological diairies with weather events mentioned, relating to the study area, and any other historical documents relating to Cork city which might yield flood information.

The data provided by these sources, which is currently being assessed and analysed, will be used in a threefold way: 1. to establish the frequency of flood events in Cork city over the past 500-1000 years; 2. to reveal the reasons for flood recurrence, examining the individual and collective influences of sea-level change, tidal variations, wind patterns and precipation levels; and 3. to interpret the emerging pattern of flooding in Cork in the context of medium/high resolution models of climatic change in the recent past, and comparing it with the general pattern of climatic variability along the Western European land-sea interface.

The initial results will indicate that substantial data sources for the historical climatology of flooding in Cork are in existence, and they show that there has been substantial periodic frequency of flood events.

Kieran Hickey, Dept. of Geogrpahy, University College Cork.

### SAVE THE BOGS

With the current rate of exploitation all raised bogs in Ireland of international and national scientific interest could be completely destroyed by 1993. An average of eight bogs per year are destroyed.

Clara Bog, Co. Offaly has been preserved already, it was handed over to the Office of Public Works for preservation in September 1987. However, more of our bogs need to be conserved.

With this aim in mind the Irish Peatland Conservation Council (IPCC) has produced an Action Plan for the protection of Irish peatlands and with the help of the Dutch Foundation for the conservation of Irish bogs and the World Wide Fund for Nature, the Netherlands, it has already raised money to purchase some of our most important threatened sites. An example of the work done is Scragh bog near Mullingar, Co. Westmeath which was presented to the nation by the Dutch Prince Bernhard in October 1987 after they had raised money to buy it.

The Dutch feel anxious we should be learning from their mistakes. The only renmant of intact bog left in Holland is being lovingly tended by a group of Dutch scientists at Bergerveen Nature Reserve. As much as £11 million has gone into preserving this site whereas it cost about £500,000 to preserve Clara Bog. Most of the animals and plants that live and grow in bogs are found nowhere else. To destroy them is to wipe out a natural community which can never be replaced. For more information on how you could become involved in the "Save the Bogs" campaign, contact the IPCC, 195 Pearse Street, Dublin 2.

Linda O'Connell, Information Officer, Irish Peatland Conservation Council.

## IRISH GEOLOGY WEEK

The first Irish Geology Week took place in September, 1988 and overall was a great success. It was organised under the auspices of the National Committee for Geology to promote the subject of geology to the general public and to show how important it is in everyday life. Also the events of the week tried to show that "dabbling" in geology, especially in one's local area could be both enjoyable and rewarding. IQUA organised an exhibition for the Dublin and Cork exhibition centres. This consisted of photographs of glaciers, landscapes affected by erosion and deposition during the glacial period, and examples of the various sediment types. In addition there was a more detailed exhibit showing the relationship between Quaternary climates and sea-level change. It was well received at both venues. Willie Warren provided an information leaflet in Dublin. Field

trips went to Blessington (Pete Coxon), Ballycotton (Bob Devoy), and to Co. Armagh (Marshall McCabe). Features of Quaternary interest were also pointed out on the aircraft flight over S.E. Leinster.

Ronnie Creighton

## Report on IQUA's Annual Field Excursion 1988

This year's annual weekend (7th-9th October) field excursion was centred in Connemara and was run in collaboration with Cumann Staidear an Duine agus an Timpeallacht. Dr. M. O'Connell (UCG), M. Gibbons (OPW) and Dr. W.P. Warren (GSI) shared the leadership. The trip attracted a record registration of forty-three (including five out of a total of eight IQUA committee members). Representatives hailed from the Central Excavation Unit, Edinburgh, GSI, National Monuments and Records Office, Mayooth, NUU, Urban Archaeological Survey, UCC, UCD, and UCG.

The programme began on Friday evening with an introductory session in the audio-visual centre, Connemara National Park, Letterfrack. M. Gibbons introduced the subject of early prehistoric settlement of Connemara. This was followed by W.P. Warren's introduction of the bedrock and glacial geology of the area. Lack of evidence to support the theory of multiple glaciations led the speaker to question whether limits as drawn by previous workers in the field were not based on "thinking aloud" rather than on fact.

To the accompaniment of a continuous downpour, the group assembled punctually in Leenaun on Saturday morning to be handed copies of the guide. We headed southward toward the first stop where the upper surface of the 60m high delta was duly inspected. The second stop was marked by an impressive stone alignment on the summit of Derryinver spur. An effective use of probes was demonstrated on a nearby hilltop barrow. Then the sodden party repaired to Connemara National Park where Karen Molloy reconstructed the palaeoecological environment of the area just visited. The pre-bog walls and subsequent peat development were considered to be much younger than the megaliths on the sampled hilltop site. Prearranged pub-lunch in Letterfrack was succeeded by an esker stop at Tullywee Bridge, Kylemore. Then the fifteen-car convoy wound its way back through Letterfrack for the sixth time in less than twenty-four hours to examine the postglacial woodland history and prehistoric land use of Lough Sheeauns, Cleggan. We returned to Clifden

via Streamstown Bay to view the site of partially submerged freshwater peat deposits indicative of low sea levels around 4000 BP. The day was best summed up in wry comment from Peter Wilson as we headed back to the B/B: "It only rained once!"...

On Sunday morning the group's commendable punctuality stood the test of the tide at Ard Oileán, a drumlin joined to the mainland by a causeway. Drumlin sediments are remarkably well-exposed at the seaward end of the island. The coastal theme was continued with a visit to an extensive midden site at Truska and another prearranged lunch at Roundstone. The convoy then headed eastward to view P. Mohr's Quaternary Shannawona fault and on to the final stop, another coastally exposed drumlin, An Cnoc, at Indreabhan where the group dispersed.

Congraulations to the leaders for a well-organised and enjoyable weekend excursion.

#### Irene Quinn

#### IQUA FIELD GUIDES

- 1. South County Down. A.M. McCabe (ed.) (1978)
- 2. Galtees Region. F.M. Synge (ed.) (1979) not in print.
- 3. Co. Tyrone. K.J. Edwards (ed.) (1979)
- 4. The south and east coasts of Co. Wexford. R.W.G. Carter and J.D. Orford (eds.) (1981)
- 5. Clare Island. P. Coxon (ed.) (1982) not in print.
- 6. South West Iveragh, Co. Kerry. G.F. Mitchell, P. Coxon, A. Price (eds.) (1983).
- 7. North East Co. Donegal and North West Co. Londonderry. P. Wilson and R.G.W. Carter (eds.) (1984).
- 8. Sligo and West Leitrim. R. Thorn (ed.) (1985)
- 9. Corca Dhuibhne. W.P. Warren et al. (1986)
- 10. Offaly and West Kildare. R.F. Hammond, W.P. Warren, D. Daly (1987)
- 11. Connemara. M. O'Connell, W.P. Warren (1988)

Available from: Mr. Michael Healy, Dept. of Geography, University College, Cork.

## Forthcoming Events

- IQUA Annual Symposium. Friday, December 2, 1988.
  "Causes and Indicators of Quaternary Climate Change".
  Venue: Geological Survey of Ireland, Beggars Bush, Haddington Road,
  Dublin 4.
  (See attached sheet for details).
- Geographical Society of Ireland. The Farrington Memorial Lecture.
   Thursday, December 1, 1988.
   "Irish Quaternary Studies: Advances and Retreats". Dr. Peter Coxon,
   Trinity College Dublin.
   Venue: Museum Building, Trinity College Dublin, 8 p.m.
- 1989 IQUA A.G.M. will be held in Cork: provisional date is the weekend of 4 March.