

Irish Meteorological Society

Newsletter

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all Society members
from the officers and
members of the committee !*

President: J.A.Scott

Secretary: A.Kelly

Irish Meteorological Society

The Irish Meteorological Society was founded in 1981 with the object of promoting an interest in meteorology in Ireland and disseminating meteorological knowledge, pure and applied. Membership is welcomed from those with an interest in meteorology, climate and the environment. The Society organises lectures, seminars, outings and an annual dinner for members and guests. An A.G.M. takes place, usually in April each year to coincide with the annual one-day seminar.

Summaries of lectures and other articles of meteorological interest are published in the Society's Newsletter. Articles and comments on articles are welcomed from members for publication.

The address of the Society is : Irish Meteorological Society,
c/o Irish Meteorological Service,
Glasnevin Hill,
Dublin 9

As of 12/91, annual subscription rates are as follows: Greater Dublin Area £12,
elsewhere £8.

Students are welcomed at half the stated rates.

The officers and committee members for 1991/1992 are as follows:

*President	Dr. J.A. Scott
Vice-President	Mr. S.F. Browne
Secretary	Mr. A. Kelly
Assistant-Secretary	Mr. J. Doyle
Treasurer	Mr. S. McCarthy
*Assistant-Treasurer	Mr. M. Mansfield

*Mr. P. Vardon
Mr. G. Fleming
Mr. K. Commins
Mr. S. Walsh
Ms. E. Cusack
Dr. M. Joyce

* indicates those whose terms of office expire in 1992

Members of the Society may subscribe to the Monthly Weather Bulletin published by the Climate and Applications Division of the Irish Meteorological Service at the preferential (as of 12/91) annual subscription of £15, by kind permission of the Irish Meteorological Service. The Society gratefully acknowledges the assistance and facilities which it enjoys from the Irish Meteorological Service. Members may also receive "Weather" magazine, published by the Royal Meteorological Society, again at preferential rates. Details from the Treasurer at the above address.

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No Longer the Big Smoke?

Sometimes referred to as the Big Smoke, Dublin may well have to be re-nicknamed as a result of the reduction in fossil fuel emissions in the city, brought about by legislation introduced by the Department of the Environment.

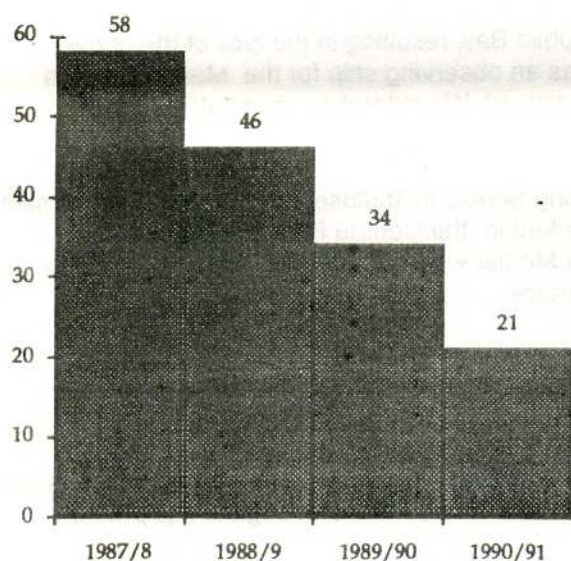
This article is reproduced from the "Environment Bulletin" produced by the Department of the Environment.

The improvement in Dublin's air quality over the past winter can now be assessed. Monitoring results indicate that the ban on smokey coal in the restricted area has been successful in reducing smoke levels and eliminating smog pollution. For the first time in eight winters, no breaches of national or EC air quality standards were recorded. In the seven years prior to 1990/'91, these standards were exceeded more than ten times a year on average.

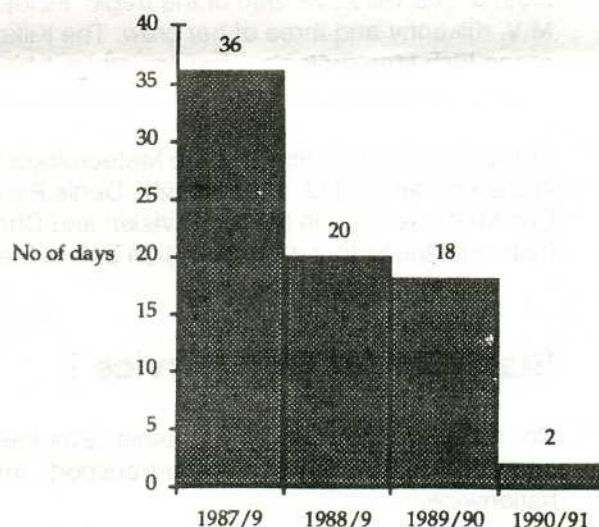
A comparison of average monthly smoke values recorded at 26 stations in the city and county during the period October/February in each of the last two winters indicates that smoke levels declined by an average 54% during the 1990/'91 period. The effect of the ban was much more marked during the critical months of November and December, when smoke levels attributable to domestic fires normally peak. Smoke levels in December 1990 were on average 71% lower than the previous year. The highest daily value recorded in 1990/'91 was 312 microgrammes per cubic metre, the highest value in 1989/'90 was 1101 micrograms.

Dublin city monitoring network - some comparisons

(a) Winter median values for smoke (in microgrammes per cubic metre)



(b) Number of days when value of 250 microgrammes per cubic metre was exceeded



Society News

Coming up..

A major international conference on water and the environment takes place in Dublin in January. - see article elsewhere in Newsletter.

The **Annual Dinner** takes place on January 25th in Barrels Restaurant, Grafton St., Dublin. The cost will be £14 per head and members may, of course, bring guests. Those wishing to attend should advise the Secretary and forward the appropriate payment (cheques payable to the Irish Met. Soc.) as soon as possible.

Head of Research Division, Dr. Peter Lynch ,will speak on the beginnings of Numerical Weather Prediction on **February 21st** at the usual venue of Earlsfort Terrace / U.C.D.

The **A.G.M. and One-day** meeting will go ahead on Saturday April 25th . A mix-up in bookings has meant that the usual venue of the Royal Marine Hotel will not be available on that date. We will notify members when an alternative is found. This year the meeting will be on weather extremes,nationally and globally. A list of those positions falling vacant on the committee this year may be found inside the front cover.

The trip to **Sherkin Island Marine Station** in May has been confirmed - more details later.

SUB. REMINDER....

*****It is the time of year for subscription renewal. The Treasurer will be delighted to hear from those whose subs. are due. If you are a subscriber to "Weather" magazine, this subscription is also due. The 1992 membership cards will be issued soon, on receipt of subscription.

Service News

Most of you will have read of the tragic incident in Dublin Bay, resulting in the loss of the of the M.V. Kilkenny and three of her crew. The Kilkenny was an observing ship for the Marine Division of the Irish Meteorological Service and will be sadly missed. We extend our sympathies to the relatives of those who lost their lives in the accident.

Three French students from the Meteorological Training School in Toulouse completed a 3-week stint in Decembert at H.Q. in Glasnevin. Denis Paradis worked in the Central Forecast Office, Eric Martin worked in Marine Division and Christophe Merlier was in Research. They treated their Irish colleagues to a wine reception before their departure.

State Car for Met. Service !

No, not the result of another Cabinet reshuffle but the acquisition of a vehicle for use by Instruments and Observations Division in the transport , installation and service of meteorological equipment nationwide.

PROSPECTS FOR WINTER 91/92. England, Wales, Ireland.

The autumn turned out much as predicted with mean temperatures close to normal - a warm September, away from the E. coast, balanced by a cold October and November. The mean autumn temperature here in Blackrock (often fairly representative of the whole area) was 10.4C (-0.4). October was the wettest month as predicted, but overall rainfall amounts will probably turn out to be less than forecast. The total here was 202mm, as against 208mm - the autumn mean. This followed on a fairly normal summer overall, the cold June being compensated for by warmer weather later. The summer CET of 15.3C and EWR of 164mm are on the normal. May was however exceptionally dry.

Years that have followed this pattern, broadly speaking, in the last two centuries are 1987, 1905, 1896, 1836 and 1833. None of the winters following on these years was cold. In fact the mean CET for those winters is 4.8C, +0.8C above the normal, which is statistically significant, in spite of the small sample. 4 of them were wet, and the other had normal rain. Furthermore, winters following on a cold October-November period, as was the case this year, have been consistently mild. In the 20 examples this century, only 3 of the following winters were cold, 3 were normal and 14 were mild. Many of these winters were wet too. In fact the 9 winters with a CET over 5.0C (+1.0C as compared to normal) were all wet except one.

So the prediction is for a mild winter, unlike last year which was rather cold. There will be less snow than normal and no prolonged spells of severe weather are likely. It is possible that all three winter months will have temperatures at normal or above. The most likely month for coldness will be December. However, the winter period likely to be somewhat wetter than normal overall.

Rob Weatherill. (Based on Manley's CET temperature series and EWR figures. These data go back over 300 years) 30.11.91

INTERNATIONAL CONFERENCE ON WATER AND THE ENVIRONMENT
Development Issues for the 21st Century

Dublin, Ireland, 26-31 January 1992

Water is a basic and essential component of life on this planet. The availability and quality of freshwater are of critical importance for both the natural and human environments. Food, energy and industrial productivity are intimately linked to a reliable water supply at reasonable cost. Judicious management of this vital resource is central to the success of strategies for sustainable development.

To address this vital subject an International Conference on Water and the Environment (ICWE) will be held in Dublin, Ireland, in January 1992. ICWE will address critical freshwater issues and will act as the formal entry for those issues into the United Nations Conference on Environment and Development (UNCED) to be held in Rio de Janeiro, Brazil, in June 1992.

ICWE will be hosted by the Government of Ireland and will be convened by the World Meteorological Organization on behalf of the more than 20 bodies and agencies of the UN system which are represented on the UN Administrative Committee on Co-ordination Inter-Secretariat Group for Water Resources.

Building on the Mar del Plata Action Plan which stemmed from the 1977 UN Water Conference, ICWE will be pivotal in focusing world attention on the critical water issues of the 1990s and beyond. It will be essential in developing a strategy to address water problems in an action-oriented and practical manner within the broader contexts of environmental and developmental needs which will be valid into the next Century.

A number of meetings will be held before ICWE to address specialized areas of concern in order to concentrate attention more effectively on key issues. National perspectives, concerns of NGOs and summary papers by UN agencies will also be incorporated in order that balanced opinions will be available for synthesis at ICWE.

ICWE will be an international consultation attended by government-designated experts and NGOs, scientists, engineers, planners, economists and others involved professionally in the field of water. A plenary session at which invited speakers will address issues of key concern will be followed by working group sessions at which the issues will be further discussed. Drafting groups will synthesize and summarize the conclusions which will be the basis of a final "Dublin Statement" to be taken to UNCED.

BACKGROUND Water, the Environment and Development

Water is one of the essential ingredients of life on planet earth. Its availability is crucial to the efficient functioning of the biosphere and it forms the lubricant which keeps the natural environment operating smoothly.

Water is also key to human development. Agricultural output is critically affected by water availability; energy production is usually dependent on water supply; industrial processes and transportation can hinge on water.

Most parts of the world suffer from the extremes of drought and flood. Droughts can result in the collapse of agricultural production and food supplies; floods can result in sudden and sometimes catastrophic loss of life, property damage and erosion of topsoil.

Additional stresses on freshwater supplies result from industrial, agricultural and biological pollution. Many rivers, lakes and groundwater reservoirs in developed and developing countries are polluted to an alarming extent, posing direct and indirect hazards to life now and in the future.

With the dramatic growth in world population, water demand has already outstripped supply in many regions and competing demands have led to critical water management problems there and elsewhere. Water supply problems are likely to be exacerbated in many parts of the world if climate changes come about as predicted. Changes in precipitation amounts and patterns accompanied by changing global energy inputs, affecting evaporation rates, will lead to changing scenarios for water availability. The additional stresses produced in areas already under severe strain may lead to economic collapse and social disintegration.

It is imperative that the world community addresses the problems of the quantity of the freshwater supply and its quality with the utmost urgency. It is a matter of survival. Initiatives must be taken at the highest international and national levels and those initiatives must translate into practical action plans at regional and local levels.

United Nations freshwater concerns

Maintenance of the quality of the Earth's environment has long been recognized as outstandingly important. Under the United Nations General Assembly Resolution 44/228 the protection of the quality and supply of freshwater resources is listed as one of nine issues of major concern in promoting environmentally sound sustainable development.

Concern for freshwater resources was demonstrated in the United Nations Water Conference held in 1977 as a result of which the Mar del Plata Action Plan was adopted. The Plan resulted in several initiatives of which the International Drinking Water Supply and Sanitation Decade was the prime example.

During the last decade there has been a growing realization that problems of freshwater availability and quality are intimately linked to broader environmental concerns and that they should not be viewed independently. There is now also a strong perception that most aspects of economic development are dependent on reliable water resources. Hence the many international, national and local conferences convened in recent years have stressed increasingly that an integrated approach to water resources management is essential. This theme of water viewed within the broader environmental and developmental contexts will be the approach taken in promoting ICWE as a lead into UNCED.

The International Conference on Water and the Environment will be the first major UN-sponsored water conference since Mar del Plata considering the full range of water issues. It will be preceded by a number of meetings designed to explore, in depth, critical issues within the sphere of water management. ICWE will be the formal lead into UNCED for freshwater issues.

INTERNATIONAL CONFERENCE ON WATER AND THE ENVIRONMENT

Main objectives of the conference

1. To assess the current status of the world's freshwater resources in relation to present and future water demands and to identify priority issues for the 1990s;
2. To develop co-ordinated inter-sectoral approaches towards managing these resources by strengthening the linkages between the various water programmes;
3. To formulate environmentally-sustainable strategies and action programmes for the 1990s and beyond to be presented to the United Nations Conference on Environment and Development;
4. To bring the above issues, strategies and actions to the attention of governments as a basis for national programmes and to increase awareness of the environmental consequences and developmental opportunities in improving the management of water resources.

Outputs from ICWE

The major documented output from ICWE will be:

1. A published volume containing the invited papers delivered to the first Plenary session.
2. A published Report on ICWE containing the conclusions and recommendations of the Working Group sessions.
3. A "Dublin Statement" as a summary document of the Conference which will be presented to UNCED.

Lead-up to ICWE

There will be several conferences and meetings which will lead into and contribute towards the synthesis of opinion at ICWE. Foremost among these are the following:

1. Symposium on Capacity Building for Sustainable Water Resources, Delft, June;
2. Water Quality Workshop, Bratislava, August;
3. Meeting to promote specific actions relevant to developing countries, Copenhagen, November;
4. ESCAP meeting on Water Resources Planning, Bangkok, October-November;
5. ASCEND:21; ICSU Conference on scientific aspects of UNCED, Vienna, November.

In addition, the subjects to be addressed at ICWE will also have been partially covered at various other major international and national gatherings in 1991. The outputs from these will be brought together during the deliberations at ICWE.

Conference format

The conference will be an international consultation attended by government-designated experts, NGOs, scientists, engineers, planners and economists.

After the Opening Ceremonies, the conference will consist of:

- A Plenary Session of one day in which 11 invited speakers of international standing will systematically address the major issues facing water resources managers within the larger framework of environmental and development concerns.
- Working group sessions lasting one and a half days. Working groups will address major aspects of water resources management and will allow participants to express themselves on the issues. Background papers, prepared beforehand, will be available as a guide to discussions. National statements and the concerns of particular NGOs will provide additional input to working group discussions.
- A poster session and exhibits will be held in Dublin Castle for half a day preceding a State Reception.
- A drafting team session in which the major conclusions and recommendations from working groups will be summarized as the basis of the Conference Proceedings.
- A final day in which conclusions from the conference will be formulated and adopted as the "Dublin Statement" which will be the basic document to be formally submitted to the final PrepComm for transmission to UNCED.