

ROINN NA MARA



FISH KILLS IN IRELAND IN 1988

by

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The number of fish kills reported in 1988 showed a very welcome reduction to 50 incidents after the 1987 record of 122. The principal source of trouble has continued to be inadequately planned agricultural practices. Run-off from silage was once more the most serious problem, accounting for 13 kills. Slurry or manure accounted for seven more. While weather conditions may have alleviated the problem, due credit for the improvement must be given to the farmers who responded to the campaign organised by the Government in conjunction with the farming organisations.

Industrial sources were responsible for 11 incidents. They have been increasing since 1985 but still remain below the maximum recorded in 1984. Sewage, for the first time since 1980, was not implicated. The most serious events in 1988 were on the Inny caused by an industrial effluent and on the Dodder following a discharge of silt from a water treatment plant.

Fish kills in 1988

The total of 50 fish kills reported in 1988 was less than half the score for the previous year and well below the rate for the years 1981 to 1986 (Fig. 1). The incidence of kills in 1988 had returned to the level prevailing in the 1970's. Although the situation remains far from satisfactory, the reduction must be seen as a very considerable achievement on the part of all concerned.

The results may have been influenced to some extent by the weather. Relatively high rainfall in May, July and August led to high river flows which alleviate the effects of deoxygenation caused by organic effluents of all kinds.

However, the most likely explanation of the greater part of the reduction has been the public reaction to the events of 1987 when, for a period during the summer, fish kills were reported nearly every day.

Successful prosecutions followed many of these in the course of the winter and at the same time a major publicity campaign was launched by Government agencies and by the major farming organisations.

Under the auspices of the Task Force established by the Minister of the Environment, a major undertaking by local authorities, fishery protection staff, and farm advisory services was set in motion. The officials concerned visited farmers to point out possible shortcomings in silage and slurry containers and offer advice on how pollution could best be avoided.

Details of the dates and places of the fish kills are given in the Table on page 4. Compared with 1986 and 1987 fish kills (Fig. 2.) were more frequent than usual in March and April but fell to a remarkably low level in July when only one incident was reported. The cause in this case was silage run-off.

The most serious cases were those of the Inny and the Dodder. In the Inny near Ballymahon, Co. Longford an industrial effluent killed thousands of fish including salmon, trout, pike, perch, bream and roach over stretch of 6 km.

The Dodder fish kill took place in August. The cause was silt released from the Bohernabreena water treatment plant. Thousands of trout were destroyed. The event received wide publicity partly because a great deal of effort has been devoted to developing the trout fishery and partly due to the river flowing through densely populated suburbs in south Dublin.

Enrichment was given as the cause of fish kills in four cases, all four being lakes and all being in areas where angling tourism is a major industry. Enrichment of inland waters by phosphates from both agricultural and domestic sources is an insidious problem and may take over from farm effluents as the most damaging form of pollution.

FISH KILLS 1988

Unconfirmed cause indicated by asterisk *

Date	Location	Species	Cause	
Eastern Region				
Mar 2	Cookstown	Enniskerry O2217	Salmon	Silt
Apr 4	Glyde	Castlebellingham O9607	Salmon adult	Slurry
Apr 14	Little Dargle	Churchtown O1627	Trout	Industrial
Apr 19	Grand Canal	Ringsend O1834	Pike	Parasites
May 3	Liffey	Straffan N9229	Salmon smolt	Unknown
May 6	Mountain Water	Castleshane H7332	Trout	Slurry*
May 19	Ward	Swords O1847	Sea trout	Industrial
May 30	Tolka	Caulstown O0245-0938	Trout	Silage
Jun 9	Inch	Castletown T2264	Trout	Silage*
Aug 16	Enfield B'water	Enfield N7541	Trout	Silage
Aug 17	Hasley	S of Ardee N9686	Trout	Crop spray
Aug 19	Clady	Robinstown N8360	Trout	Unknown
Aug 19	Dodder	Bohernabreena O2209-01428	Trout	Silt
Southern Region				
Feb 8	Pococke	Purcellsinch S5354	Salmon, trout	Industrial
Mar 1	Dissock	Killeagh X0076	Trout	Impoundment
Mar 14	Anner	Mullinahone S3242	Trout	Agricultural*
Jun 9	Ramstream	Thomastown S5641	Trout	Silage
Jun 10	Fethard-on Sea	Fethard S7804	Mullet	Silage
Jun 26	Pococke	Purcellsinch S5354	Trout	Industrial*
Jun 29	Glenaboy	Tallow W9993	Trout	Industrial
Sep 1	Grand Canal	Rathangan O6719	Pike, perch	Silage
Nov 8	Munster	Kilmanagh S3551	Trout	Slurry
Southwestern Region				
Apr 26	Ballymahane	W of Bandon W4156	Salmon parr	Agricultural
Jun 17	Lee Reservoir	Inniscarra W4872	Perch	Enrichment
Jun 24	Cork Harbour	Cobh W7966	Mullet	Unknown
Aug 5	Glanmore	Ballymore W8367	Eels	Cattle slurry
Sep 13	Oghermong	Oghermong V4776	Salmon	Pig slurry
Oct 28	Kilbrittain	N of Kilbrittain W5188	Sea trout	Building
Shannon Region				
Apr 14	Milford	Plassey R6258	Eels	Chlorination
Apr 14	Shannon	Plassey R6158	Salmon smolt	Alum
May 18	Lough Key	G8206	Perch, trout	Unknown
May 28	Ballyharda	Ballinasloe M8432	Trout	Unknown
May 28	Camoge	Meanus R4058 to R3952	Trout	Farm manure*
May 30	Clareen	Drumquinn R3169 to R3268	Trout	Farm slurry
Jun 12	Doonbeg	Doonbeg Q9964	Salmon	Silage
Jun 15	Kilkee Harbour	Kilkee Q6089	Sea fish	Slurry
Jun 16	Glosa	Ballindeeny R5135	Trout	Silage
Jun 24	Lough Rinn	East shore N1092	Roach, pike	Silage*
Jun 25	Shiven	Ballygar M7055	Salmon	Silage
June	Lough Sheelin	N4080	Trout	Enrichment
June	Lough Ennel	N3040	Trout	Enrichment
Aug 3	Inny	Ballymahon N1656 to N1155	Salmon	Industrial
Western Region				
No fish kills recorded				
Northwestern Region				
Jun 11	Owenmore	Ballymote G6516	Pike, perch	Agricultural
Jun 11	Tributary	Lough Talt G3914	Trout	Unknown
June	Deel	Crossmolina G1317	Salmonids	Silage
Jul 23	Owennabrach	South of Newport M9010	Sea trout	Silage
Northern Region				
May	Finn	North of Clones H5027	Trout	Silage
Jn/J1	Lough Oughter	H3000	Roach, bream	Enrichment
Aug 8	Lakefield Lake	Bawnboy H2119	Pike	Unknown
Sep 17	Ballaghadoo	Kilcar G7462	Trout	Industrial

Fish Kills 1969-74 and 1980-88

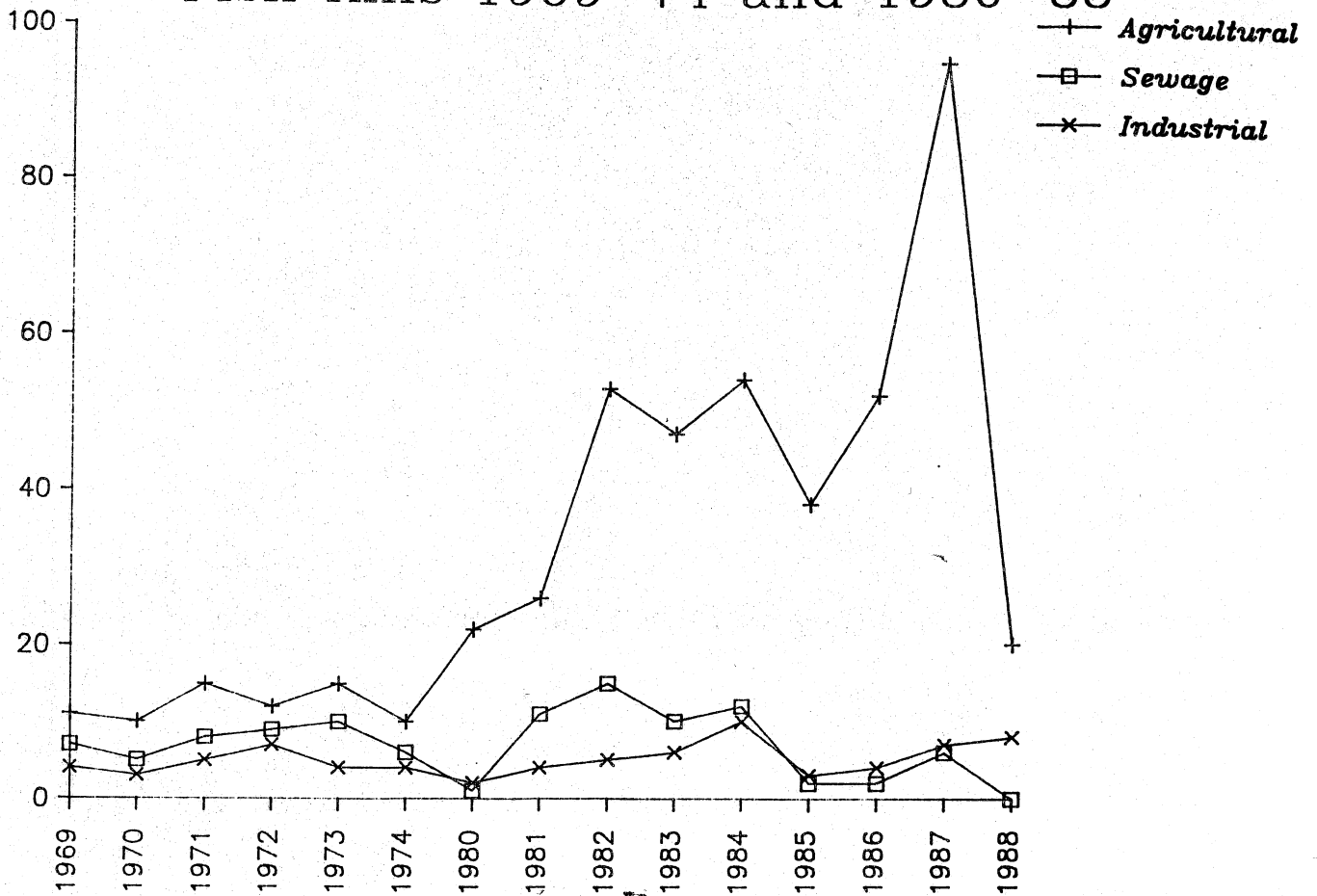
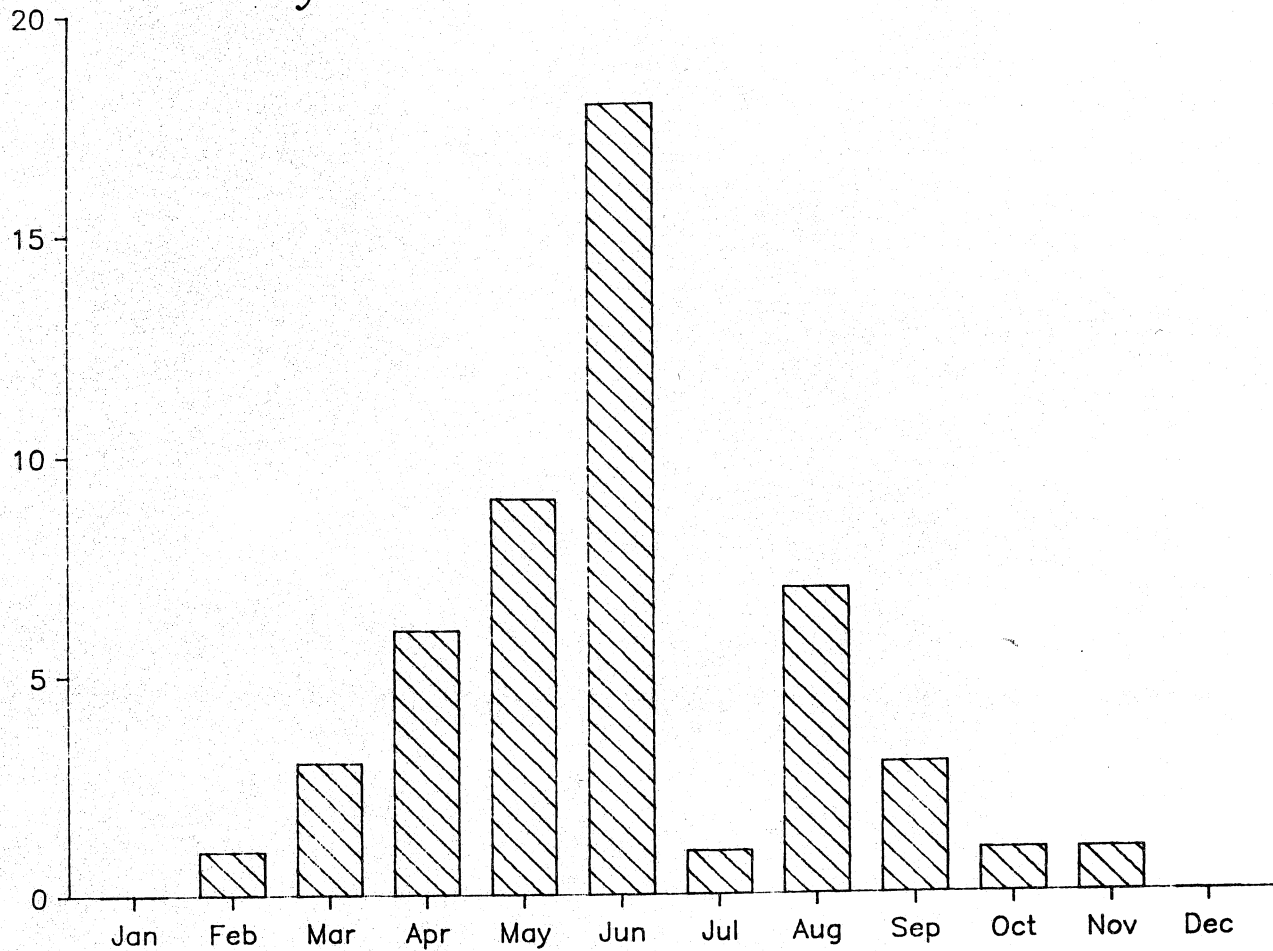


Fig. 1. Numbers of fish kills caused by the three main sources of pollution.

Monthly incidence of fish kills in 1988



Monthly incidence of fish kills 1986-87

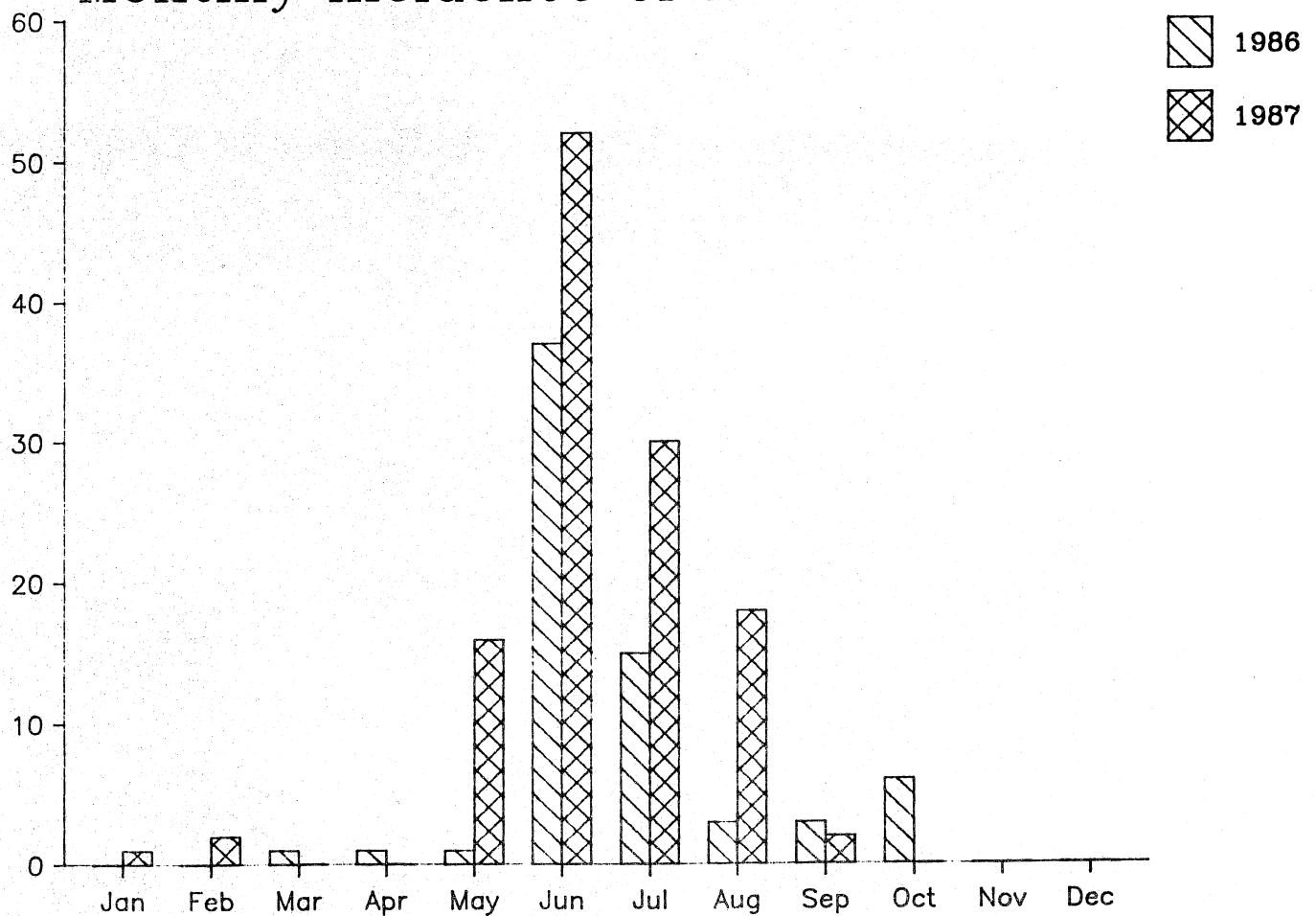


Fig. 2. Numbers of fish kills reported each month.