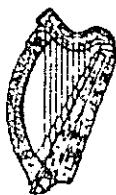


METEOROLOGICAL SERVICE



AGROMETEOROLOGICAL BULLETIN

AUGUST 1983

The Weather of August

The month began with a moderate northwest airflow backing west to southwest on the 3rd; some outbreaks of rain occurred in many areas up to the 5th from weakening rainbelts, which became slow-moving over the country. High pressure then dominated up to the 13th and the period 5th to 14th was very warm, sunny and dry, with light variable winds; occasional weak troughs affected northern areas, interrupting the sunny spell.

A southwesterly airflow set in on the 14th and later backed to southeast and east as a North Atlantic depression moved to a quasi-stationary position south of Ireland; its associated troughs moved northwards over Ireland during the following week releasing very welcome and widespread heavy and thundery rain on the perched ground. As the depression drifted eastwards to Britain further troughs followed from the North Atlantic on 22nd/23rd. Rainfall amounts in the southern half of the country were particularly large in the period up to the 23rd. The spell was also dull and humid.

High pressure again dominated from 24th to 29th; temperatures were above average but there were variable sunshine amounts and a weak trough affected the country on the 27th. A southwesterly airflow slowly set in in western areas on the 30th and a rainbelt off the west coast moved inland late on the 31st giving rain to western areas.

Monthly Amounts of Precipitation were well below normal everywhere except in the southeast and south midlands. Values varied from 32% of normal at Glenties to 85% at Fermoy (Moore Park) in relation to most of the country; in the southeast and south midlands values varied from 108% at Rosslare to 158% at J.F.K. Park. The main wet spells occurred between the 15th and 23rd. Maximum accumulated soil moisture deficits had reached about 100mm at most stations by the middle of the month, causing drought and severely restricting growth. These were reduced rapidly during the wet spell. Johnstown Castle had a remarkably low deficit of 21mm by the end of the month but the deficit at Kinsealy was still up to 70mm. The only major spells of weather favouring potato blight during the main crop season occurred from the 16th to 18th and 20th to 27th.

Mean Monthly Air Temperature was well above normal everywhere, record values occurring at some widely spaced stations. Values varied from 2.5C° above at Shannon Airport to 1.1C° above at Rosslare. Degree days with threshold 4.4C° were some 15% to 25% above average and, with threshold 10C° were some 25% to 55% above average.

Mean Duration of Bright Sunshine varied from 77% of normal at Birr to 113% at Valentia. Solar radiation varied from 85% of average at Birr to 111% at Valentia.

Strong Winds did not occur except in the northwest on the 1st/2nd.

Summary Very warm and very dry apart from a confined wet spell 15th to 23rd which greatly helped relieve drought conditions in the soil. Sunshine varied about normal.

The data contained in this Bulletin are Provisional. Some of the material in Table 1 will be published in its final form later in the Monthly Weather Report; final values of Solar Radiation at stations in Table 2 will be published in the Annual Summary of Solar Radiation.

TABLE 1

AUGUST 1983

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)		
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE
Carlow (Oak Park) Co. Carlow	1-10	1.3	-	2	0	22.4	10.9	16.6	-	5.4	3	0	122	-	68	-	1.5	3	0	-	-	6.35	-	2.3	-	-
	11-20	21.7	-	3	3	23.2	13.5	18.4	-	8.8	13	0	140	-	84	-	4.4	11	0	-	-	5.22	-	2.9	-	-
	21-END	46.2	-	5	4	20.1	12.8	16.5	-	6.6	28	0	133	-	72	-	3.0	28	0	-	-	2.54	-	1.9	-	-
	MONTH	69.2	108	10	7	21.9	12.4	17.1	-	5.4	3	0	395	-	224	-	1.5	3	0	-	-	4.63	-	2.4	-	69
Shannon Airport e Co. Clare	1-10	1.2	-	1	1	22.4	13.0	17.7	-	9.2	3	0	133	-	78	-	5.9	3	0	21.1	-	8.11	-	3.4	0	-
	11-20	29.6	-	6	5	23.0	15.0	19.0	-	10.1	13	0	146	-	90	-	8.2	13	0	20.6	-	4.10	-	3.3	0	-
	21-END	15.3	-	3	3	20.8	14.3	17.6	-	10.5	28	0	145	-	83	-	8.2	28	0	18.7	-	2.50	-	2.9	0	-
	MONTH	46.1	56	10	9	22.1	14.1	18.1	+2.5	9.2	3	0	424	124	251	146	5.9	3	0	20.1	+3.4	4.83	97	3.2	0	80
Fermoy (Coolnakilla) Co. Cork	1-10	0.4	-	1	0	21.1	10.3	15.7	-	7.0	3	0	113	-	59	-	N/A	N/A	-	-	6.38	-	3.6	-	-	
	11-20	46.3	-	6	5	21.0	12.8	16.9	-	9.2	13	0	125	-	69	-	N/A	N/A	-	-	5.02	-	4.2	-	-	
	21-END	21.7	-	7	4	19.4	11.4	15.4	-	6.0	22	0	121	-	61	-	N/A	N/A	-	-	2.76	-	3.2	-	-	
	MONTH	68.4	-	14	9	20.4	11.5	16.0	-	6.0	22	0	359	-	189	-	N/A	N/A	-	-	4.66	-	3.6	-	62	
Fermoy (Moore Park) Co. Cork	1-10	0.4	-	1	0	22.1	10.5	16.3	-	3.5	3	0	119	-	65	-	0.5	3	0	-	-	5.90	-	N/A	-	-
	11-20	47.9	-	6	5	22.3	13.7	18.0	-	7.8	14	0	136	-	81	-	2.4	11	0	-	-	5.56	-	N/A	-	-
	21-END	16.8	-	4	3	20.8	13.2	17.0	-	8.0	30	0	138	-	77	-	4.4	30	0	-	-	3.39	-	N/A	-	-
	MONTH	65.1	85	11	8	21.7	12.5	17.1	-	3.5	3	0	393	-	223	-	0.5	3	0	-	-	4.90	-	N/A	-	N/A
Mallow Co. Cork	1-10	1.2	-	2	1	N/A	N/A	N/A	-	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	6.12	-	-	-	-	
	11-20	25.8	-	6	4	N/A	N/A	N/A	-	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	4.25	-	-	-	-	
	21-END	12.9	-	6	3	N/A	N/A	N/A	-	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	3.37	-	-	-	-	
	MONTH	39.9	47	14	8	N/A	N/A	N/A	-	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	4.54	-	-	-	-	
Roches Point e Co. Cork	1-10	0.6	-	1	0	20.9	12.8	16.8	-	8.7	3	0	124	-	69	-	4.5	3	0	19.0	-	7.65	-	3.6	0	-
	11-20	33.2	-	6	5	20.9	15.1	18.0	-	12.3	14	0	136	-	80	-	7.9	14	0	19.3	-	5.37	-	5.3	0	-
	21-END	15.5	-	3	3	20.8	14.7	17.7	-	10.5	30	0	147	-	85	-	7.2	30	0	19.0	-	4.59	-	3.3	0	-
	MONTH	49.3	66	10	8	20.8	14.2	17.5	+2.0	8.7	3	0	407	122	234	146	4.5	3	0	19.1	+2.7	5.83	103	4.1	0	84
Glencolumbkille Co. Donegal	1-10	10.0	-	4	3	19.1	11.5	15.3	-	8.8	3	0	109	-	53	-	3.5	3	0	-	-	6.10	-	2.4	-	-
	11-20	25.1	-	8	6	19.8	13.2	16.5	-	9.0	13	0	121	-	65	-	4.5	13	0	-	-	N/A	-	2.6	-	-
	21-END	27.8	-	6	5	18.8	12.7	15.8	-	10.8	29	0	125	-	63	-	6.8	29	0	-	-	3.62	-	2.1	-	-
	MONTH	62.9	-	18	14	19.2	12.5	15.8	-	8.8	3	0	355	-	182	-	3.5	3	0	-	-	N/A	-	2.3	-	N/A

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

AUGUST 1983

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)				
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE		
Glenties Co. Donegal	1-10	8.5	-	4	3	19.5	10.4	15.0	-	6.8	3	0	106	-	52	-	4.0	3	0	-	-	5.33	-	-	-	-	-	-
	11-20	15.2	-	6	4	19.9	12.8	16.4	-	7.5	13	0	120	-	65	-	3.0	13	0	-	-	4.43	-	-	-	-	-	-
	21-END	16.9	-	5	4	19.4	12.1	15.7	-	9.5	30	0	125	-	63	-	6.0	30	0	-	-	3.45	-	-	-	-	-	-
	MONTH	40.6	32	15	11	19.6	11.8	15.7	-	6.8	3	0	350	-	180	-	3.0	13	0	-	-	4.37	-	-	-	-	-	-
Malin Head Co. Donegal	1-10	8.7	-	4	3	16.7	12.2	14.5	-	9.9	1	0	101	-	45	-	7.5	1	0	18.4	-	5.21	-	4.8	2	-	-	-
	11-20	17.3	-	5	3	18.8	13.7	16.3	-	10.4	14	0	119	-	63	-	7.0	14	0	18.7	-	4.57	-	5.7	0	-	-	-
	21-END	9.2	-	5	2	18.3	13.4	15.9	-	12.1	29	0	126	-	64	-	9.0	28	0	17.6	-	3.40	-	4.7	1	-	-	-
	MONTH	35.2	42	14	8	18.0	13.1	15.5	+1.3	9.9	1	0	345	115	172	134	7.0	14	0	18.2	+3.1	4.36	92	5.1	3	64	-	-
Casement Aerodrome Co. Dublin	1-10	4.4	-	1	1	21.1	11.4	16.2	-	6.2	3	0	118	-	64	-	2.4	3	0	18.3	-	6.76	-	3.7	0	-	-	-
	11-20	26.4	-	5	3	22.8	12.9	17.8	-	6.6	13	0	134	-	79	-	3.1	13	0	18.5	-	5.11	-	3.8	0	-	-	-
	21-END	23.7	-	6	3	20.4	12.7	16.5	-	6.7	28	0	133	-	73	-	2.5	28	0	17.7	-	3.01	-	2.3	0	-	-	-
	MONTH	54.5	69	12	7	21.4	12.3	16.9	+2.0	6.2	3	0	386	121	216	141	2.4	3	0	18.2	-	4.90	96	3.2	0	71	-	-
Dublin Airport Co. Dublin	1-10	3.5	-	3	1	20.2	12.4	16.3	-	8.1	3	0	119	-	64	-	6.5	3	0	19.7	-	6.87	-	3.4	0	-	-	-
	11-20	27.8	-	5	4	21.9	13.8	17.9	-	9.5	13	0	135	-	79	-	8.3	13	0	19.8	-	5.24	-	3.2	0	-	-	-
	21-END	14.6	-	5	2	20.1	13.6	16.8	-	9.1	28	0	137	-	75	-	7.4	28	0	18.3	-	3.41	-	2.3	0	-	-	-
	MONTH	45.9	58	13	7	20.7	13.3	17.0	+2.0	8.1	3	0	390	120	218	141	6.5	3	0	19.2	+2.7	5.12	98	3.0	0	74	-	-
Kinsealy Co. Dublin	1-10	5.3	-	3	3	19.9	11.0	15.5	-	7.5	3	0	111	-	56	-	4.8	3	0	-	-	6.62	-	2.4	-	-	-	-
	11-20	27.0	-	5	5	21.7	12.6	17.1	-	8.9	13	0	127	-	72	-	4.9	14	0	-	-	5.21	-	2.4	-	-	-	-
	21-END	13.4	-	3	3	19.9	12.6	16.2	-	7.7	31	0	130	-	69	-	5.0	31	0	-	-	3.33	-	1.9	-	-	-	-
	MONTH	45.7	61	11	11	20.5	12.1	16.3	-	7.5	3	0	368	-	197	-	4.8	3	0	-	-	5.00	-	2.2	-	62	-	-
Galway Co. Galway	1-10	2.2	-	4	0	20.9	12.7	16.8	-	10.2	3	0	124	-	68	-	5.6	3	0	20.7	-	7.69	-	3.9	0	-	-	-
	11-20	52.9	-	6	5	21.4	14.4	17.9	-	9.8	13	0	135	-	79	-	7.5	13	0	20.6	-	3.86	-	3.5	0	-	-	-
	21-END	16.9	-	4	3	19.9	13.9	16.9	-	11.5	28	0	138	-	76	-	8.2	30	0	19.3	-	3.60	-	3.2	0	-	-	-
	MONTH	72.0	73	14	8	20.7	13.7	17.2	+1.8	9.8	13	0	397	-	224	-	5.6	3	0	20.2	-	5.00	100	3.5	0	72	-	-
Killarney (Muckross House) Co. Kerry	1-10	10.2	-	1	1	21.1	11.1	16.1	-	6.0	3	0	117	-	62	-	2.3	3	0	-	-	6.89	-	-	-	-	-	-
	11-20	42.5	-	6	5	23.0	14.7	18.8	-	9.5	14	0	144	-	89	-	6.3	13	0	-	-	4.15	-	-	-	-	-	-
	21-END	16.7	-	5	4	20.4	13.8	17.1	-	8.0	29	0	140	-	79	-	5.5	29	0	-	-	3.99	-	-	-	-	-	-
	MONTH	69.4	-	12	10	21.5	13.2	17.3	-	6.0	3	0	401	-	230	-	2.3	3	0	-	-	4.98	-	-	-	-	-	-

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TABLE 1 (CONTINUED)

AUGUST 1983

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR									GROUND			SOIL (10cm)		MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)		
						MEAN <MAX.	MEAN MIN.	MEAN <DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	1.4	-	1	1	20.5	11.3	15.9	-	7.6	3	0	115	-	61	-	4.9	3	0	19.2	-	7.14	-	3.0	0	-
	11-20	58.4	-	6	6	21.1	14.2	17.6	-	9.6	13	0	132	-	77	-	6.0	13	0	19.4	-	4.95	-	4.7	1	-
	21-END	15.0	-	5	3	19.9	13.7	16.8	-	8.0	29	0	136	-	75	-	4.6	29	0	18.7	-	4.53	-	3.7	1	-
	MONTH	74.8	75	12	10	20.5	13.1	16.8	+1.4	7.6	3	0	384	117	213	137	4.6	29	0	19.1	+2.6	5.51	113	3.8	2	71
Ardfert (Liscahane) Co. Kerry	1-10	4.7	-	1	1	21.3	10.9	16.1	-	7.9	3	0	117	-	62	-	1.6	3	0	-	-	N/A	-	-	-	-
	11-20	33.8	-	8	7	21.5	14.3	17.9	-	8.4	13	0	135	-	79	-	3.0	13	0	-	-	3.19	-	-	-	-
	21-END	27.3	-	6	5	20.3	12.8	16.5	-	7.5	29	0	133	-	74	-	1.6	29	0	-	-	N/A	-	-	-	-
	MONTH	65.8	-	15	13	21.0	12.6	16.8	-	7.5	29	0	385	-	215	-	1.6	3	0	-	-	N/A	-	-	-	-
Lullymore Co. Kildare	1-10	0.9	-	1	0	21.1	10.1	15.6	-	4.6	3	0	112	-	59	-	-2.0	3	1	-	-	6.44	-	3.2	-	-
	11-20	34.1	-	4	3	22.6	11.9	17.3	-	3.4	13	0	129	-	75	-	-1.6	13	1	-	-	4.76	-	3.1	-	-
	21-END	35.6	-	6	5	19.8	12.1	15.9	-	5.3	28	0	127	-	66	-	4.5	31	0	-	-	2.25	-	2.2	-	-
	MONTH	70.6	83	11	8	21.1	11.4	16.2	-	3.4	13	0	368	-	200	-	-2.0	3	2	-	-	4.41	-	2.8	-	60
Kilkenny Co. Kilkenny	1-10	2.1	-	2	1	22.3	11.0	16.7	-	4.3	3	0	123	-	68	-	-1.5	3	1	20.1	-	6.73	-	2.2	0	-
	11-20	16.6	-	3	3	23.3	14.0	18.7	-	7.8	14	0	143	-	87	-	4.4	14	0	20.7	-	5.51	-	2.5	0	-
	21-END	69.5	-	6	4	20.7	12.3	16.5	-	6.5	28	0	133	-	73	-	0.5	28	0	18.3	-	2.52	-	1.6	0	-
	MONTH	88.2	122	11	8	22.1	12.4	17.3	+2.1	4.3	3	0	398	123	228	143	-1.5	3	1	19.7	+2.8	4.84	91	2.1	0	69
Mooncoin (Silverspring) Co. Kilkenny	1-10	1.9	-	1	1	22.4	10.5	16.4	-	4.0	3	0	120	-	66	-	-1.0	3	1	-	-	6.59	-	-	-	-
	11-20	48.3	-	4	4	22.8	13.8	18.3	-	6.5	14	0	139	-	84	-	2.7	14	0	-	-	6.05	-	-	-	-
	21-END	45.5	-	5	5	20.7	13.0	16.9	-	8.5	28	0	137	-	76	-	4.9	31	0	-	-	3.01	-	-	-	-
	MONTH	95.7	114	10	10	21.9	12.4	17.2	-	4.0	3	0	396	-	227	-	-1.0	3	1	-	-	5.15	-	-	-	-
Ballinamore Co. Leitrim	1-10	4.1	-	4	1	21.4	10.9	16.2	-	6.2	3	0	118	-	63	-	-1.3	3	1	-	-	5.41	-	1.7	-	-
	11-20	22.1	-	5	4	21.7	12.1	16.9	-	6.1	13	0	125	-	70	-	1.9	13	0	-	-	4.96	-	1.7	-	-
	21-END	34.3	-	5	4	20.4	12.6	16.5	-	5.7	28	0	133	-	73	-	-0.1	28	1	-	-	2.87	-	1.4	-	-
	MONTH	60.5	59	14	9	21.1	11.9	16.5	-	5.7	28	0	375	-	206	-	-1.3	3	2	-	-	4.36	-	1.6	-	58
Ardee (Boharnamoe) Co. Louth	1-10	3.5	-	4	2	21.3	10.2	15.8	-	5.1	3	0	114	-	60	-	5.0	3	0	-	-	-	-	-	-	-
	11-20	33.7	-	4	4	25.8	10.9	18.3	-	8.0	15	0	139	-	85	-	5.1	13	0	-	-	-	-	-	-	-
	21-END	12.8	-	4	2	20.8	11.9	16.4	-	6.2	27	0	132	-	71	-	4.1	27	0	-	-	-	-	-	-	-
	MONTH	50.0	-	12	8	22.6	11.0	16.8	-	5.1	3	0	384	-	217	-	4.1	27	0	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

		AUGUST 1983																								
STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)		
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN-DAILY	DIFFERENCE FROM AVERAGE
Ballinrobe (Creagh) Co. Mayo	1-10	4.8	-	4	2	20.9	11.8	16.3	-	8.2	3	0	119	-	64	-	2.3	1	0	-	-	5.12	-	2.2	-	-
	11-20	22.4	-	6	6	21.8	12.7	17.3	-	7.4	13	0	129	-	73	-	1.3	13	0	-	-	4.76	-	2.2	-	-
	21-END	15.2	-	4	3	N/A	13.0	N/A	-	9.7	30	0	N/A	-	N/A	-	3.8	30	0	-	-	2.98	-	1.9	-	-
	MONTH	42.4	41	14	11	N/A	12.5	N/A	-	7.4	13	0	N/A	-	N/A	-	1.3	13	0	-	-	4.25	-	2.1	-	N/A
Belmullet Co. Mayo	1-10	6.6	-	5	4	18.9	12.0	15.5	-	8.7	7	0	111	-	55	-	5.7	3	0	18.0	-	5.20	-	4.5	1	-
	11-20	21.4	-	7	5	20.3	13.1	16.7	-	8.1	13	0	123	-	68	-	3.8	13	0	18.6	-	4.60	-	4.1	0	-
	21-END	13.4	-	5	3	18.8	12.6	15.7	-	9.5	29	0	125	-	63	-	5.8	29	0	17.9	-	2.52	-	4.8	1	-
	MONTH	41.4	45	17	12	19.3	12.6	16.0	+1.3	8.1	13	0	358	117	186	139	3.8	13	0	18.2	+2.2	4.05	79	4.5	2	58
Claremorris Co. Mayo	1-10	6.3	-	3	3	21.2	11.3	16.3	-	6.8	3	0	119	-	64	-	1.5	3	0	18.4	-	4.65	-	3.7	0	-
	11-20	19.8	-	5	5	21.7	12.5	17.1	-	6.2	13	0	127	-	72	-	3.5	13	0	19.0	-	4.52	-	3.9	0	-
	21-END	11.1	-	3	3	20.1	13.0	16.5	-	9.1	30	0	133	-	72	-	5.7	30	0	18.1	-	2.40	-	3.3	0	-
	MONTH	37.2	38	11	11	21.0	12.3	16.6	+2.2	6.2	13	0	379	126	209	154	1.5	3	0	18.5	+3.0	3.81	88	3.6	0	60
Glenamoy Co. Mayo	1-10	9.9	-	4	3	19.5	11.4	15.5	-	7.5	3	0	111	-	56	-	4.9	3	0	-	-	5.21	-	1.9	-	-
	11-20	17.9	-	6	4	20.6	12.6	16.6	-	5.4	13	0	122	-	68	-	3.9	13	0	-	-	4.12	-	2.0	-	-
	21-END	21.1	-	5	4	19.3	12.2	15.8	-	7.4	29	0	125	-	64	-	5.0	29	0	-	-	2.09	-	2.1	-	-
	MONTH	48.9	43	15	11	19.8	12.1	15.9	-	5.4	13	0	358	-	188	-	3.9	13	0	-	-	3.75	-	2.0	-	52
Dunsany (Grange) Co. Meath	1-10	5.8	-	3	2	20.6	10.8	15.7	-	5.5	3	0	113	-	59	-	-1.3	3	1	-	-	6.21	-	-	-	-
	11-20	27.8	-	5	5	22.2	12.6	17.4	-	7.4	11	0	130	-	75	-	2.9	13	0	-	-	4.58	-	-	-	-
	21-END	15.2	-	4	4	20.5	12.6	16.5	-	7.0	28	0	134	-	73	-	3.5	28	0	-	-	2.87	-	-	-	-
	MONTH	48.8	57	12	11	21.1	12.0	16.5	-	5.5	3	0	376	-	207	-	-1.3	3	1	-	-	4.50	-	-	-	-
Clones Co. Monaghan	1-10	5.9	-	3	3	20.9	11.8	16.4	-	6.7	3	0	120	-	65	-	1.6	3	0	17.0	-	5.23	-	2.2	0	-
	11-20	25.0	-	4	4	21.7	12.8	17.3	-	8.0	13	0	129	-	73	-	2.7	13	0	17.5	-	4.43	-	2.3	0	-
	21-END	15.8	-	6	3	20.5	12.7	16.6	-	6.4	28	0	134	-	73	-	0.2	28	0	17.1	-	3.16	-	1.8	0	-
	MONTH	46.7	48	13	10	21.0	12.4	16.7	+2.4	6.4	28	0	382	125	212	154	0.2	28	0	17.2	+1.5	4.24	109	2.1	0	64
Birr Co. Offaly	1-10	4.9	-	6	2	21.5	11.2	16.3	-	6.0	3	0	119	-	65	-	1.9	3	0	19.8	-	5.22	-	2.7	0	-
	11-20	36.0	-	6	5	22.5	13.6	18.0	-	6.9	13	0	136	-	81	-	3.5	13	0	20.1	-	4.23	-	2.7	0	-
	21-END	23.7	-	4	4	20.4	13.4	16.9	-	8.3	28	0	137	-	76	-	5.3	28	0	18.5	-	2.23	-	2.1	0	-
	MONTH	64.6	77	16	11	21.4	12.7	17.1	+2.0	6.0	3	0	393	123	222	146	1.9	3	0	19.5	+3.0	3.84	77	2.5	0	63

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

AUGUST 1983

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND														
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND			SOIL (10cm)			MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)												
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE										
Dundrum (Knockavilla) Co. Tipperary	1-10	2.2	-	3	0	22.0	10.9	16.4	-	5.2	3	0	120	-	66	-	0.9	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	31.9	-	6	5	22.5	13.8	18.1	-	7.2	13	0	137	-	82	-	3.4	13	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	19.6	-	6	4	20.5	13.0	16.7	-	7.0	30	0	136	-	76	-	4.6	28	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	53.7	-	15	9	21.6	12.6	17.1	-	5.2	3	0	394	-	224	-	0.9	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dungarvan (Carriglea) Co. Waterford	1-10	0.0	-	0	0	22.6	10.5	16.6	-	3.9	3	0	122	-	68	-	3.7	3	0	-	-	-	-	7.30	-	1.6	-	-	-	-	-	-	-	-	-	
	11-20	30.4	-	6	4	22.8	13.6	18.2	-	7.7	14	0	138	-	83	-	7.5	14	0	-	-	-	-	5.58	-	1.9	-	-	-	-	-	-	-	-	-	
	21-END	23.6	-	5	4	21.5	13.7	17.6	-	9.3	30	0	145	-	84	-	8.9	28	0	-	-	-	-	2.87	-	1.2	-	-	-	-	-	-	-	-	-	-
	MONTH	54.0	61	11	8	22.3	12.6	17.5	-	3.9	3	0	405	-	234	-	3.7	3	0	-	-	-	-	5.17	-	1.6	-	-	-	-	-	-	-	-	63	-
Mullingar Co. Westmeath	1-10	3.7	-	4	3	20.8	11.1	15.9	-	4.7	3	0	115	-	62	-	1.7	3	0	18.8	-	-	-	7.13	-	2.6	0	-	-	-	-	-	-	-	-	-
	11-20	28.7	-	6	4	21.5	12.9	17.2	-	8.3	13	0	128	-	73	-	5.6	13	0	18.9	-	-	-	4.72	-	3.2	0	-	-	-	-	-	-	-	-	-
	21-END	29.6	-	4	3	19.7	12.5	16.1	-	8.0	30	0	129	-	68	-	6.3	28	0	17.7	-	-	-	2.12	-	2.5	0	-	-	-	-	-	-	-	-	-
	MONTH	62.0	70	14	10	20.6	12.2	16.4	+2.2	4.7	3	0	372	119	202	138	1.7	3	0	18.4	+2.4	-	-	4.57	98	2.8	0	-	-	-	-	-	-	-	64	-
J.F.K. Park Co. Wexford	1-10	0.9	-	2	0	21.7	11.3	16.5	-	6.6	3	0	121	-	66	-	0.4	3	0	-	-	-	-	7.38	-	2.8	-	-	-	-	-	-	-	-	-	-
	11-20	64.3	-	4	3	22.1	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	0	-	-	-	-	-	6.30	-	4.7	-	-	-	-	-	-	-	-	-	
	21-END	71.1	-	6	5	20.4	13.4	16.9	-	7.4	28	0	138	-	77	-	1.0	28	0	-	-	-	-	3.26	-	2.2	-	-	-	-	-	-	-	-	-	
	MONTH	136.3	158	12	8	21.4	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	0	-	-	-	-	-	5.57	-	3.3	-	-	-	-	-	-	-	N/A	-	
Clonroche Co. Wexford	1-10	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	-	N/A	-	N/A	-	-	-	-	-	-	-	-	-	
	11-20	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	-	N/A	-	N/A	-	-	-	-	-	-	-	-	-	
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	-	N/A	-	N/A	-	-	-	-	-	-	-	-	-	
	MONTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	-	N/A	-	N/A	-	-	-	-	-	-	-	-	N/A	
Johnstown Castle Co. Wexford	1-10	3.8	-	1	1	20.4	12.3	16.4	-	9.2	2	0	120	-	64	-	4.0	3	0	-	-	-	-	9.47	-	3.2	-	-	-	-	-	-	-	-	-	
	11-20	65.8	-	4	4	20.3	13.9	17.1	-	10.0	13	0	127	-	71	-	6.5	14	0	-	-	-	-	6.68	-	3.6	-	-	-	-	-	-	-	-	-	
	21-END	35.0	-	5	4	19.6	13.3	16.5	-	8.5	28	0	133	-	72	-	5.0	31	0	-	-	-	-	4.71	-	2.3	-	-	-	-	-	-	-	-	-	
	MONTH	104.6	116	10	9	20.1	13.2	16.6	-	8.5	28	0	380	-	207	-	4.0	3	0	-	-	-	-	6.88	-	3.0	-	-	-	-	-	-	-	-	78	-
Rosslare Co. Wexford	1-10	2.1	-	2	1	18.9	13.2	16.1	-	9.0	2	0	117	-	61	-	6.2	3	0	20.0	-	-	-	9.25	-	5.1	0	-	-	-	-	-	-	-	-	
	11-20	38.5	-	3	3	19.5	14.8	17.1	-	12.7	14	0	127	-	71	-	7.4	14	0	19.9	-	-	-	6.66	-	4.8	0	-	-	-	-	-	-	-	-	
	21-END	36.4	-	4	3	18.7	14.0	16.3	-	10.7	28	0	131	-	69	-	8.7	28	0	18.8	-	-	-	4.77	-	3.7	0	-	-	-	-	-	-	-	-	
	MONTH	77.0	108	9	7	19.0	14.0	16.5	+1.1	9.0	2	0	375	113	202	127	6.2	3	0	19.5	+2.2	-	-	6.83	107	4.5	0	-	-	-	-	-	-	85	-	

NOTES ON THE TABLES IN JANUARY 1984

TABLE 2 GLOBAL SOLAR RADIATION

STATION	PERIOD	AMOUNT
		Joule/cm ²
Malin Head Co. Donegal	1-10	17122
	11-20	14129
	21-end	12911
	Month	44162
Dublin Airport Co. Dublin	1-10	17285
	11-20	13048
	21-end	11516
	Month	41849
Cahiriveen (Valentia Obs.) Co. Kerry	1-10	19850
	11-20	13639
	21-end	14763
	Month	48252
Kilkenny Co. Kilkenny	1-10	17291
	11-20	14218
	21-end	11466
	Month	42975
Belmullet Co. Mayo	1-10	16328
	11-20	13453
	21-end	12101
	Month	41882
Clones Co. Monaghan	1-10	15808
	11-20	12564
	21-end	10796
	Month	39168
Birr Co. Offaly	1-10	14701
	11-20	10927
	21-end	10337
	Month	35965

TABLE 3 POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE AUGUST 1983

STATION	PERIOD	P.E. (mm)		SOIL MOISTURE (mm)	
		Amount	Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-10	38.5	9	-104	-
	11-20	30.7	-	97	7
	21-end	28.0	-	49	48
	Month	97.2	-	-	-
Kinsealy Co. Dublin	1-10	39.4	8	97	-
	11-20	18.5	-	75	22
	21-end	16.0	-	70	5
	Month	73.9	-	-	-
Cahiriveen (Valentia Obs.) Co. Kerry	1-10	19.9	10	78	-
	11-20	22.8	-	45	33
	21-end	12.2	-	40	5
	Month	54.9	-	-	-
Ballinamore Co. Leitrim	1-10	30.4	8	93	-
	11-20	24.7	-	78	15
	21-end	34.2	-	60	18
	Month	89.3	-	-	-
Glenamoy Co. Mayo	1-10	26.5	8	66	-
	11-20	20.9	-	61	5
	21-end	17.3	-	51	10
	Month	64.7	-	-	-
Johnstown Castle Co. Wexford	1-10	44.4	7	105	-
	11-20	44.7	-	45	60
	21-end	11.6	-	21	24
	Month	100.7	-	-	-

Notes on the tables in January issue

special topic

USE OF METEOROLOGICAL DATA IN LIVER

FLUKE CONTROL IN IRELAND

(continued from July)

The degree to which weather is favourable to liver fluke in Ireland has been measured since 1966 in terms of the Ollerenshaw Index and by Ross's Stormont 'Wet Day' Index, and the systems have proved to be generally satisfactory in predicting the levels of disease. The Ollerenshaw Index (see WMO Tech. Note 159, 1978, pp 2-5), which is essentially a measure of the excess of rainfall over evapotranspiration (values of which are derived at the main weather stations), weighted by the number of rain days, has proved to be a useful indicator of habitat wetness. Ross's index (ibid, pp 14-19), which is simpler, since it uses the accumulation of wet-days as the value of the Index, has the advantage that it can include any number of rainfall stations thought necessary to give greater areal resolution.

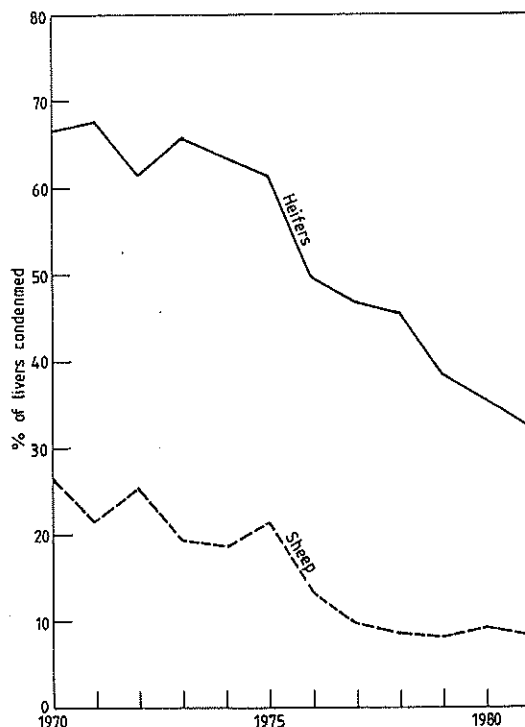
SOME MODIFYING INFLUENCES In wetter areas of the west, the Ollerenshaw index may not accurately estimate the subsequent level of disease likely to be found because:-

- for many hilly areas the main network of weather stations does not adequately reflect the temperature season
- there may well be a tendency towards an annual fluke cycle rather than a seasonal one in western areas
- while the level of disease found in animals is a function of the level of infection on the herbage, because of good husbandry there has been a marked decline ever the years in the overall level of infection found
- in wet summers hill areas are permanently wet and disease levels are not as great as one might expect because waterlogged peat habitats are too acidic to support the snail.

NATIONAL ADVISORY GROUP ON FASCIOLIASIS

The National Advisory Group on Fascioliasis convenes a meeting of experts from the Veterinary Advisory Services and Research Laboratories, the Veterinary College and Agricultural Institute, and the agricultural meteorologist of the Meteorological Service early in September each year. On the basis of (1) the meteorological data presented, (2) the counts of snails infected at experimental sites, (3) the results of faecal samples returned by various farmers to the Research Laboratory for examination, (4) the numbers of infected livers at Abattoirs and (5) the results of recent research, the group estimates the likely level of infection. The recommendations of the group are communicated widely and given general media coverage.

The Figure across shows how there has been a fall over recent years in the percent of livers condemned at abattoirs for liver fluke infection in heifers and sheep. The disease levels in other animals show similar trends.



Percent of livers condemned at abattoirs for liver fluke infection for the specified animals, 1970 - 1981.

(Courtesy Dept. of Agriculture)

T. Keane
Agricultural Meteorology