

METEOROLOGICAL SERVICE



APRIL 1986

AGROMETEOROLOGICAL BULLETIN

The Weather of April

Weak troughs and northwesterly winds over Ireland on 1st/2nd were displaced on 3rd by high pressure to the north of the country which dominated to 11th. The northwestward drift of low pressure cells over Europe caused strong pressure gradients and increased cold northeast winds over the country from 7th to 10th. As the high declined westwards an area of low pressure developed in the vicinity of Ireland, with widespread rain everywhere. As the centre moved southeastwards towards southern England, strong northeast winds set in again in its wake on 15th/16th. The weather remained cold.

A ridge on 17th preceded further frontal troughs on 18th, although as the depression became complex with two centres near Ireland, the weather from 21st to 24th proved to be mainly fair. A ridge on 25th was again succeeded by further troughs in a westerly flow from 26th to 28th. The weather became less cold. After this, cloudy and mild conditions set in and there was widespread rain in strong south to southwest winds by the end of the month.

Precipitation:

Amounts of precipitation were above to well above normal in northern and western regions and below normal in southern areas. Amounts varied from 168% of normal at Belmullet to 58% at Cork Airport. Wettest spells were 13th-15th, 18th-21st, and from 26th to the end of the month in many areas; the 19th was generally the wettest day.

Temperature:

Temperatures were well below normal everywhere so that the month proved to be the coldest April on record. Values ranged from 2.7C° below normal at Belmullet to 1.7C° below at Malin Head. Air frost was widespread on 3rd-7th, 11th, 18th, and 23rd/24th; the coldest night was at Birr on 11th. Ground frost was widespread throughout the month and frost was frequently sharp to severe in the first week, reaching -10.2C° at Birr on 7th. Soil temperatures (100mm) reached their greatest negative anomaly (-3.5C° to -4.0C°) between 16th and 20th.

Sunshine and Radiation:

Sunshine hours were above to well above normal except in eastern areas and parts of the west. Amounts varied from 120% of normal at Valentia Observatory to 91% at Casement Aerodrome. Global radiation was generally near normal (97%) but well above normal at Valentia Observatory (109%).

Wind:

Strong winds with gale gusts occurred from 7th to 10th, on 16th (when general gales developed in western and northern coastal areas), 20th and 28th-30th.

Summary:

Exceptionally cold everywhere. Wet in northern regions but relatively dry in southern areas. In general sunshine was above normal.

The data contained in this Bulletin are provisional. Some of the material in Table 1 will be published in its final form in the Monthly Weather Report; final values of Global Radiation at stations in Table 2 will be published in the annual Solar Radiation Observations.

TABLE 1

APRIL 1986

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				TOTAL NO. OF HOURS	% 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 ²	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE
Carlow (Oak Park) Co. Carlow	1-10	7.4	-	4	4	7.9	1.0	4.5	-	-1.8	7	2	11	-	0	-	-5.5	4	6	-	-	69.7	-	4.6	-	-
	11-20	38.0	-	9	6	9.0	1.9	5.4	-	-1.7	11	2	10	-	0	-	-5.5	18	3	-	-	26.5	-	4.8	-	-
	21-END	9.0	-	6	3	11.9	3.1	7.5	-	0.0	23	0	36	-	6	-	-3.6	23	6	-	-	64.9	-	3.2	-	-
	MONTH	54.4	116	19	13	9.6	2.0	5.8	-	-1.8	7	4	65	-	6	-	-5.5	18	15	-	-	161.1	-	4.2	-	52
Shannon Airport Co. Clare	1-10	2.4	-	2	1	9.5	1.1	5.3	-	-1.8	7	3	18	-	1	-	-5.6	3	8	5.8	-	69.3	-	3.9	3	-
	11-20	28.7	-	9	6	9.6	2.9	6.3	-	-1.8	11	1	23	-	1	-	-4.2	11	3	7.1	-	41.8	-	4.5	2	-
	21-END	25.3	-	8	6	11.9	3.8	7.9	-	0.6	23	0	37	-	5	-	-2.1	23	4	8.8	-	55.9	-	3.5	2	-
	MONTH	56.4	99	19	13	10.3	2.6	6.5	-2.4	-1.8	11	4	78	50	7	-	-5.6	3	15	7.2	-2.5	167.0	110	4.0	7	57
Cork Airport Co. Cork	1-10	0.7	-	2	0	8.3	0.9	4.6	-	-1.2	7	3	12	-	0	-	-5.0	7	8	5.3	-	74.0	-	6.6	3	-
	11-20	29.6	-	7	5	8.7	2.1	5.4	-	-0.4	11	1	17	-	0	-	-5.0	11	4	6.4	-	47.3	-	6.7	5	-
	21-END	10.5	-	8	5	10.7	3.2	6.9	-	1.5	23	0	29	-	3	-	-3.4	22	5	8.4	-	59.0	-	6.3	4	-
	MONTH	40.8	58	17	10	9.2	2.0	5.6	-2.4	-1.2	7	4	58	46	3	-	-5.0	11	17	6.7	-2.5	180.3	112	6.5	12	66
Fermoy (Coolnakilla) Co. Cork	1-10	0.1	-	0	0	7.5	-0.5	3.5	-	-3.5	10	8	8	-	0	-	N/A				64.6	-	4.7	-	-	
	11-20	38.1	-	9	7	7.7	-1.5	3.1	-	-7.0	11	8	9	-	0	-	N/A				39.6	-	5.2	-	-	
	21-END	24.6	-	9	7	10.1	0.8	5.5	-	-4.6	22	4	21	-	1	-	N/A				50.3	-	3.4	-	-	
	MONTH	62.8	-	18	14	8.4	-0.4	4.0	-	-7.0	11	20	39	-	1	-	N/A				154.5	-	4.5	-	46	
Fermoy (Moore Park) Co. Cork	1-10	0.2	-	1	0	9.0	-0.2	4.4	-	-3.0	7	6	14	-	0	-	-8.5	7	8	-	-	66.3	-	4.1	-	-
	11-20	34.1	-	8	6	9.4	1.7	5.5	-	-2.7	11	1	19	-	1	-	-8.0	11	6	-	-	40.1	-	4.0	-	-
	21-END	15.5	-	7	4	11.9	1.4	6.7	-	-2.4	22	5	31	-	5	-	-4.0	22	6	-	-	57.0	-	3.1	-	-
	MONTH	49.8	87	16	10	10.1	1.0	5.5	-	-3.0	7	12	64	-	6	-	-8.5	7	20	-	-	163.4	-	3.8	-	39
Roches Point Co. Cork	1-10	2.6	-	2	1	9.0	2.3	5.6	-	0.3	7	0	18	-	0	-	-3.3	6	8	6.5	-	70.5	-	5.5	5	-
	11-20	35.6	-	8	5	9.1	3.3	6.2	-	0.6	11	0	21	-	1	-	-3.6	11	4	7.3	-	47.5	-	6.6	3	-
	21-END	4.4	-	5	2	10.6	4.1	7.3	-	2.6	22	0	31	-	2	-	-2.5	22	4	9.3	-	63.3	-	5.3	4	-
	MONTH	42.6	80	15	8	9.6	3.2	6.4	-2.4	0.3	7	0	70	49	3	-	-3.6	11	16	7.7	-2.2	181.3	112	5.8	12	66
Glencolumbkille Co. Donegal	1-10	8.2	-	3	2	8.8	0.5	4.6	-	-2.2	8	3	13	-	0	-	-8.5	10	10	-	-	N/A	-	2.5	-	-
	11-20	60.9	-	10	9	9.0	2.8	5.9	-	0.0	11	0	20	-	0	-	-7.0	11	8	-	-	N/A	-	3.7	-	-
	21-END	64.1	-	8	7	10.6	3.4	7.0	-	0.6	22	0	29	-	2	-	-7.0	22	6	-	-	N/A	-	2.9	-	-
	MONTH	133.2	-	21	18	9.4	2.2	5.8	-	-2.2	8	3	61	-	2	-	-8.5	10	24	-	-	N/A	-	3.0	-	N/A

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

APRIL 1986

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND						
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			TOTAL NO. OF HOURS	% 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 4.0°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	3.4	-	4	1	9.2	-1.4	3.9	-	-3.0	6	7	14	-	1	-	-6.4	6	9	-	-	-	-	-	-	-	-	-
	11-20	74.7	-	9	9	8.5	1.6	5.1	-	-3.2	11	1	15	-	0	-	-5.7	11	5	-	-	-	-	-	-	-	-	
	21-END	52.2	-	9	5	10.7	1.6	6.1	-	-2.3	22	4	25	-	2	-	-5.0	22	6	-	-	-	-	-	-	-	-	
	MONTH	130.3	161	22	15	9.4	0.6	5.0	-	-3.0	6	12	53	-	3	-	-6.4	6	20	-	-	-	-	-	-	-	-	
Malin Head Co. Donegal	1-10	4.7	-	2	1	7.6	3.3	5.4	-	0.9	2	0	13	-	0	-	-2.0	4	3	6.9	-	80.3	-	7.4	2	-	-	
	11-20	39.7	-	8	6	8.2	3.6	5.9	-	0.9	18	0	17	-	0	-	-4.1	18	2	6.7	-	33.8	-	9.9	7	-	-	
	21-END	24.9	-	7	5	9.7	4.3	7.0	-	1.3	22	0	28	-	1	-	-3.5	22	4	9.0	-	67.1	-	7.3	5	-	-	
	MONTH	69.3	122	17	12	8.5	3.7	6.1	-1.7	0.9	18	0	59	50	1	-	-4.1	18	9	7.5	-1.3	181.2	114	8.2	14	66	-	
Casement Aerodrome Co. Dublin	1-10	9.8	-	5	3	7.6	0.5	4.1	-	-2.4	3	4	10	-	0	-	-7.0	5	8	4.4	-	47.7	-	5.6	4	-	-	
	11-20	27.5	-	9	7	8.6	2.0	5.3	-	-2.8	18	2	17	-	0	-	-7.0	18	7	5.6	-	20.9	-	5.6	1	-	-	
	21-END	12.3	-	6	4	12.0	2.3	7.2	-	-1.3	24	2	33	-	6	-	-4.7	24	7	8.2	-	72.1	-	5.2	4	-	-	
	MONTH	49.6	106	20	14	9.4	1.6	5.5	-2.3	-2.8	18	8	60	48	6	-	-7.0	18	22	6.1	-	140.7	91	5.5	9	55	-	
Dublin Airport Co. Dublin	1-10	8.4	-	5	2	7.9	1.7	4.8	-	-0.8	5	2	12	-	0	-	-4.7	2	8	6.1	-	62.4	-	6.4	4	-	-	
	11-20	29.1	-	8	7	8.6	2.3	5.5	-	-1.1	18	1	17	-	0	-	-4.1	18	4	6.5	-	23.6	-	5.7	2	-	-	
	21-END	10.7	-	5	3	12.0	3.6	7.8	-	0.7	23	0	38	-	6	-	-2.6	23	4	9.3	-	73.5	-	4.6	1	-	-	
	MONTH	48.2	103	18	12	9.5	2.6	6.0	-2.1	-1.1	18	3	66	51	7	-	-4.7	2	16	7.3	-1.9	159.5	98	5.5	7	62	-	
Kinsealy Co. Dublin	1-10	7.9	-	3	2	7.4	1.0	4.2	-	-1.8	5	3	9	-	0	-	-3.4	5	6	-	-	66.2	-	4.3	-	-	-	
	11-20	30.0	-	8	7	8.4	2.2	5.3	-	-0.9	18	1	15	-	0	-	-5.8	18	4	-	-	27.1	-	4.3	-	-	-	
	21-END	9.9	-	4	3	11.6	3.5	7.5	-	-0.1	23	1	35	-	6	-	-5.4	23	6	-	-	80.8	-	3.4	-	-	-	
	MONTH	47.8	106	15	12	9.1	2.2	5.7	-	-1.8	5	5	59	-	6	-	-5.8	18	16	-	-	174.1	-	4.0	-	54	-	
Galway Co. Galway	1-10	0.3	-	1	0	9.4	1.1	5.3	-	-1.4	4	2	17	-	1	-	-4.0	1	8	5.9	-	72.1	-	5.2	4	-	-	
	11-20	37.4	-	6	6	9.1	3.1	6.1	-	-0.5	11	1	21	-	1	-	-3.0	11	3	7.1	-	41.5	-	5.6	4	-	-	
	21-END	36.5	-	8	6	10.8	3.9	7.4	-	0.5	23	0	32	-	3	-	-2.0	27	2	9.2	-	63.8	-	5.2	3	-	-	
	MONTH	74.2	112	15	12	9.7	2.7	6.2	-2.3	-1.4	4	3	70	-	4	-	-4.0	1	13	7.4	-	177.4	113	5.4	11	61	-	
Killarney (Muckross House) Co. Kerry	1-10	1.7	-	2	1	8.9	0.6	4.8	-	-2.1	4	6	15	-	1	-	-8.5	6	10	-	-	56.2	-	-	-	-	-	
	11-20	36.1	-	9	8	8.6	2.9	5.8	-	-2.7	11	1	19	-	0	-	-9.5	11	8	-	-	28.6	-	-	-	-	-	
	21-END	21.5	-	9	7	11.1	2.9	7.0	-	0.7	25	0	30	-	3	-	-3.2	25	8	-	-	50.8	-	-	-	-	-	
	MONTH	59.3	65	20	16	9.5	2.1	5.8	-	-2.7	11	7	65	-	4	-	-9.5	11	26	-	-	135.6	-	-	-	-	-	

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NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

APRIL 1986

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			TOTAL NO. OF HOURS	% 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	1.9	-	2	1	9.3	2.2	5.8	-	-1.0	5	1	19	-	0	-	-3.5	5	5	6.8	-	71.2	-	5.1	4	-
	11-20	49.8	-	9	9	9.2	3.8	6.5	-	-0.9	11	1	24	-	0	-	-5.4	11	1	7.9	-	41.2	-	6.1	4	-
	21-END	25.3	-	6	5	11.3	4.0	7.7	-	1.0	23	0	35	-	3	-	-1.3	23	1	9.6	-	72.9	-	5.8	3	-
	MONTH	77.0	97	17	15	9.9	3.4	6.7	-2.5	-1.0	5	2	78	60	4	-	-5.4	11	7	8.1	-2.2	185.3	120	5.7	11	63
Ardfert (Liscahane) Co. Kerry	1-10	0.0	-	0	0	9.1	-0.3	4.4	-	-4.5	7	6	14	-	0	-	-8.2	4	8	-	-	71.5	-	-	-	-
	11-20	38.7	-	9	6	9.1	2.6	5.8	-	-3.7	11	1	21	-	1	-	-7.1	11	5	-	-	44.0	-	-	-	-
	21-END	17.9	-	6	5	11.0	2.8	6.9	-	-0.4	23	1	30	-	3	-	-4.3	24	6	-	-	63.8	-	-	-	-
	MONTH	56.6	-	15	11	9.7	1.7	5.7	-	-4.5	7	8	65	-	4	-	-8.2	4	19	-	-	179.3	-	-	-	-
Lullymore Co. Kildare	1-10	13.6	-	4	3	7.8	-0.9	3.5	-	-3.5	5	6	10	-	0	-	-10.5	5	8	-	-	63.2	-	4.8	-	-
	11-20	49.7	-	9	8	8.5	1.1	4.8	-	-2.5	18	3	14	-	0	-	-9.5	18	5	-	-	29.0	-	4.5	-	-
	21-END	15.9	-	4	4	11.8	1.4	6.6	-	-2.3	23	4	30	-	5	-	-8.5	23	8	-	-	59.9	-	3.3	-	-
	MONTH	79.2	147	17	15	9.4	0.5	4.9	-	-3.5	5	13	55	-	5	-	-10.5	5	21	-	-	152.1	-	4.2	-	46
Kilkenny Co. Kilkenny	1-10	0.3	-	1	0	8.6	1.4	5.0	-	-1.2	7	2	14	-	0	-	-6.5	3	7	5.5	-	64.3	-	4.8	4	-
	11-20	24.9	-	8	6	9.6	2.2	5.9	-	-1.5	18	2	21	-	1	-	-7.3	18	4	6.4	-	27.7	-	3.9	2	-
	21-END	14.7	-	7	4	12.4	3.1	7.8	-	0.6	23	0	38	-	7	-	-4.3	23	5	9.3	-	65.0	-	3.1	0	-
	MONTH	39.9	77	16	10	10.2	2.2	6.2	-2.0	-1.5	18	4	73	53	8	-	-7.3	18	16	7.1	-2.2	157.0	103	3.9	6	57
Mooncoin (Silverspring) Co. Kilkenny	1-10	3.6	-	3	2	9.1	0.8	4.9	-	-2.4	5	3	15	-	0	-	-6.9	5	8	-	-	66.8	-	-	-	-
	11-20	25.1	-	7	6	9.4	2.4	5.9	-	-1.0	18	2	21	-	1	-	-7.9	18	6	-	-	33.7	-	-	-	-
	21-END	20.9	-	7	4	11.9	2.8	7.4	-	-0.7	23	1	35	-	5	-	-4.8	23	6	-	-	53.4	-	-	-	-
	MONTH	49.6	83	17	12	10.1	2.0	6.1	-	-2.4	5	6	71	-	6	-	-7.9	18	20	-	-	153.9	-	-	-	-
Ballinamore Co. Leitrim	1-10	15.8	-	2	2	8.6	0.7	4.6	-	-0.6	5	3	12	-	0	-	-8.0	5	8	-	-	69.0	-	2.7	-	-
	11-20	49.4	-	10	7	8.4	1.8	5.1	-	-2.0	11	2	15	-	0	-	-9.8	11	6	-	-	33.1	-	4.1	-	-
	21-END	24.7	-	8	5	11.0	1.8	6.4	-	-1.8	23	3	27	-	3	-	-7.3	23	8	-	-	52.5	-	2.8	-	-
	MONTH	89.9	138	20	14	9.3	1.4	5.4	-	-2.0	11	8	55	-	4	-	-9.8	11	22	-	-	154.6	-	3.2	-	47
Ardee (Boharnamoe) Co. Louth	1-10	7.7	-	2	1	8.7	-0.3	4.2	-	-2.9	4	5	13	-	0	-	-7.9	4	10	-	-	-	-	-	-	-
	11-20	47.7	-	8	7	8.6	2.1	5.3	-	-2.3	18	2	17	-	0	-	-7.2	18	5	-	-	-	-	-	-	-
	21-END	13.5	-	7	5	13.0	2.0	7.5	-	-1.1	23	3	37	-	7	-	-4.6	24	7	-	-	-	-	-	-	-
	MONTH	68.9	130	17	13	10.1	1.2	5.7	-	-2.9	4	10	67	-	8	-	-7.9	4	22	-	-	-	-	-	-	-

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TABLE 1 (CONTINUED)

APRIL 1986

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND					
		AMOUNT	% OF AVERAGE	RAIN DAYS		AIR							GROUND			SOIL (10cm)				TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)			
				WET	DAYS	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	
																											WET
Ballinrobe (Creagh) Co. Mayo	1-10	2.6	-	2	1	9.7	-0.4	4.6	-	-2.1	4	8	16	-	1	-	-8.8	4	8	-	-	69.7	-	3.7	-	-	
	11-20	34.0	-	9	7	9.0	2.3	5.6	-	-3.7	11	2	19	-	0	-	-9.1	11	6	-	-	34.2	-	4.4	-	-	
	21-END	48.7	-	9	9	11.0	3.1	7.0	-	-0.4	23	1	30	-	3	-	-6.6	23	7	-	-	54.9	-	3.3	-	-	
	MONTH	85.3	127	20	17	9.9	1.6	5.8	-	-3.7	11	11	65	-	4	-	-9.1	11	21	-	-	158.8	-	3.8	-	49	
Belmullet Co. Mayo	1-10	4.3	-	4	2	8.8	1.1	4.9	-	-1.4	4	3	14	-	0	-	-6.2	4	8	7.0	-	76.3	-	5.8	2	-	
	11-20	44.9	-	10	9	9.1	3.2	6.1	-	-2.1	11	1	21	-	0	-	-6.2	11	3	7.8	-	42.3	-	7.5	5	-	
	21-END	46.8	-	7	5	10.4	3.4	6.9	-	0.5	22	0	28	-	2	-	-3.6	22	5	8.9	-	61.4	-	6.8	4	-	
	MONTH	96.0	168	21	16	9.4	2.6	6.0	-2.7	-2.1	11	4	63	45	2	-	-6.2	11	16	7.9	-1.7	188.0	110	6.7	11	60	
Claremorris Co. Mayo	1-10	2.8	-	1	1	9.1	0.2	4.6	-	-1.5	4	6	14	-	1	-	-6.0	5	8	5.3	-	63.9	-	4.8	1	-	
	11-20	37.7	-	9	7	8.5	1.8	5.1	-	-2.1	11	1	15	-	0	-	-5.4	11	6	6.2	-	27.6	-	5.3	3	-	
	21-END	38.4	-	9	7	10.5	2.1	6.3	-	-0.2	23	2	25	-	3	-	-5.0	27	6	7.6	-	45.7	-	4.7	4	-	
	MONTH	78.9	127	19	15	9.4	1.3	5.4	-2.5	-2.1	11	9	54	42	3	-	-6.0	5	20	6.4	-2.3	137.2	98	4.9	8	46	
Glenamoy Co. Mayo	1-10	4.3	-	2	1	8.8	0.2	4.5	-	-2.0	4	6	13	-	0	-	-5.9	6	8	-	-	71.5	-	3.3	-	-	
	11-20	50.6	-	9	6	9.1	2.7	5.9	-	-1.6	11	1	20	-	0	-	-5.8	11	3	-	-	36.2	-	4.9	-	-	
	21-END	56.4	-	8	7	N/A	2.5	N/A	-	-0.9	25	1	N/A	-	N/A	-	-4.5	22	5	-	-	59.2	-	3.3	-	-	
	MONTH	111.3	148	19	14	N/A	1.8	N/A	-	-2.0	4	8	N/A	-	N/A	-	-5.9	6	16	-	-	166.9	-	3.9	-	N/A	
Dunsany (Grange) Co. Meath	1-10	5.7	-	5	3	7.7	0.1	3.9	-	-3.0	5	4	9	-	0	-	-6.5	5	7	-	-	59.5	-	-	-	-	
	11-20	51.7	-	9	7	7.9	1.5	4.7	-	-2.7	18	2	12	-	0	-	-7.3	18	4	-	-	22.4	-	-	-	-	
	21-END	13.6	-	5	4	11.6	1.9	6.8	-	-2.2	23	3	31	-	5	-	-5.2	23	7	-	-	60.6	-	-	-	-	
	MONTH	71.0	134	19	14	9.1	1.2	5.1	-	-3.0	5	9	53	-	5	-	-7.3	18	18	-	-	142.5	-	-	-	-	
Clones Co. Monaghan	1-10	6.4	-	2	2	8.4	0.5	4.4	-	-1.8	4	4	12	-	0	-	-8.8	4	8	4.9	-	71.3	-	4.8	2	-	
	11-20	56.5	-	9	8	8.0	1.8	4.9	-	-1.7	11	2	14	-	0	-	-9.1	11	5	5.7	-	30.1	-	5.0	3	-	
	21-END	17.3	-	7	6	11.2	2.2	6.7	-	0.5	23	0	29	-	4	-	-4.5	24	7	7.7	-	52.0	-	4.1	2	-	
	MONTH	80.2	151	18	16	9.2	1.5	5.3	-2.4	-1.8	4	6	54	44	4	-	-9.1	11	20	6.1	-2.5	153.4	109	4.6	7	48	
Birr Co. Offaly	1-10	0.7	-	2	0	8.6	0.1	4.4	-	-3.0	7	5	13	-	0	-	-10.2	7	8	5.9	-	63.3	-	3.2	1	-	
	11-20	44.1	-	6	6	9.0	1.5	5.2	-	-3.3	11	2	17	-	0	-	-9.1	11	3	6.7	-	31.8	-	3.3	2	-	
	21-END	10.6	-	6	3	11.6	2.4	7.0	-	-1.2	23	1	32	-	5	-	-7.1	23	8	9.4	-	55.5	-	2.9	2	-	
	MONTH	55.4	101	14	9	9.7	1.3	5.5	-2.6	-3.3	11	8	61	45	5	-	-10.2	7	19	7.3	-2.1	150.6	103	3.1	5	48	
MARCH 1986 ERRATA																											
Clones Co. Monaghan	1-10	20.8	-	6	3	8.1	0.6	4.3	-	-6.8	2	3	16	-	1	-	-14.1	2	7	3.2	-	42.0	-	5.1	2	-	
	MONTH	97.3	157	24	18	8.9	1.8	5.3	-0.3	-6.8	2	6	62	79	2	-	-14.1	2	16	4.8	-0.8	118.9	123	6.3	15	32	

TABLE 1 (CONTINUED)

APRIL 1986

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)																BRIGHT SUNSHINE		WIND										
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND				SOIL (10cm)				TOTAL NO. OF HOURS	% 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	2.3	-	3	1	8.8	0.2	4.5	-	-3.0	4	4	13	-	0	-	-9.9	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	39.0	-	7	7	8.8	1.8	5.3	-	-2.3	11	1	16	-	1	-	-8.4	11	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	28.7	-	6	6	11.9	2.2	7.1	-	-1.5	25	2	33	-	5	-	-6.0	25	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	70.0	-	16	14	9.8	1.4	5.6	-	-3.0	4	7	63	-	6	-	-9.9	6	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dungarvan (Carriglea) Co. Waterford	1-10	2.5	-	5	0	10.0	1.0	5.5	-	-0.9	5	4	20	-	1	-	-3.8	7	8	-	-	62.1	-	3.0	-	-	-	-	-	-	-	-	-	
	11-20	34.1	-	7	6	10.4	2.3	6.4	-	0.1	11	0	25	-	2	-	-2.5	11	4	-	-	40.2	-	3.0	-	-	-	-	-	-	-	-	-	
	21-END	15.9	-	6	5	12.7	3.0	7.8	-	-0.2	23	1	40	-	7	-	-1.8	22	5	-	-	65.9	-	2.6	-	-	-	-	-	-	-	-	-	
	MONTH	52.5	75	18	11	11.0	2.1	6.6	-	-0.9	5	5	84	-	10	-	-3.8	7	17	-	-	168.2	-	2.9	-	-	-	-	-	-	-	-	52	
Mullingar Co. Westmeath	1-10	7.6	-	3	2	8.2	0.6	4.4	-	-1.6	3	4	11	-	0	-	-5.0	7	8	5.2	-	70.3	-	4.3	2	-	-	-	-	-	-	-	-	
	11-20	47.8	-	9	6	8.3	1.9	5.1	-	-1.4	18	2	14	-	0	-	-4.0	11	4	6.0	-	31.7	-	4.3	2	-	-	-	-	-	-	-	-	
	21-END	20.0	-	7	4	11.1	1.9	6.5	-	-1.4	23	2	28	-	4	-	-4.0	23	8	8.2	-	64.3	-	3.5	3	-	-	-	-	-	-	-	-	
	MONTH	75.4	128	19	12	9.2	1.5	5.3	-2.4	-1.6	3	8	54	42	4	-	-5.0	7	20	6.5	-2.3	166.3	111	4.0	7	53	-	-	-	-	-	-		
J.F.K. Park Co. Wexford	1-10	7.4	-	3	3	8.7	1.6	5.1	-	0.1	7	0	15	-	0	-	-6.0	5	8	-	-	63.6	-	5.0	-	-	-	-	-	-	-	-	-	
	11-20	34.0	-	7	6	9.0	2.4	5.7	-	0.1	18	0	18	-	1	-	-5.6	11	9	-	-	35.0	-	4.2	-	-	-	-	-	-	-	-	-	
	21-END	18.8	-	4	4	11.3	4.0	7.7	-	1.1	23	0	35	-	4	-	-6.0	23	6	-	-	62.4	-	4.2	-	-	-	-	-	-	-	-	-	
	MONTH	60.2	99	14	13	9.7	2.6	6.2	-	0.1	18	0	69	-	5	-	-6.0	23	23	-	-	161.0	-	4.5	-	-	-	-	-	-	-	-	59	
Clonroche Co. Wexford	1-10	12.5	-	5	4	8.2	0.4	4.3	-	-1.8	5	4	12	-	0	-	-8.9	5	9	-	-	64.3	-	N/A	-	-	-	-	-	-	-	-	-	
	11-20	33.7	-	7	7	8.8	1.7	5.3	-	-1.9	18	3	17	-	0	-	-6.7	18	8	-	-	32.0	-	N/A	-	-	-	-	-	-	-	-	-	
	21-END	17.8	-	9	6	11.3	2.8	7.0	-	0.5	25	0	32	-	4	-	-5.6	23	5	-	-	61.9	-	N/A	-	-	-	-	-	-	-	-	-	
	MONTH	64.0	94	21	17	9.5	1.6	5.5	-	-1.9	18	7	60	-	4	-	-8.9	5	22	-	-	158.2	-	N/A	-	N/A	-	-	-	-	-	-	N/A	
Johnstown Castle Co. wexford	1-10	7.2	-	5	2	7.5	1.1	4.3	-	-0.7	5	2	10	-	0	-	-7.0	5	8	-	-	67.1	-	4.5	-	-	-	-	-	-	-	-	-	
	11-20	41.7	-	8	6	8.4	2.5	5.5	-	0.7	18	0	16	-	0	-	-4.9	18	7	-	-	28.4	-	4.3	-	-	-	-	-	-	-	-	-	
	21-END	11.3	-	4	3	10.6	3.7	7.1	-	0.5	23	0	30	-	2	-	-4.5	23	5	-	-	70.5	-	3.8	-	-	-	-	-	-	-	-	-	
	MONTH	60.2	96	17	11	8.8	2.5	5.6	-	-0.7	5	2	56	-	3	-	-7.0	5	20	-	-	166.0	-	4.2	-	-	-	-	-	-	-	-	51	
Rosslare Co. Wexford	1-10	10.1	-	5	3	7.0	2.8	4.9	-	0.3	7	0	10	-	0	-	-2.2	7	5	6.2	-	71.7	-	10.4	5	-	-	-	-	-	-	-	-	
	11-20	26.7	-	6	5	8.3	3.5	5.9	-	1.2	18	0	18	-	0	-	-2.9	18	2	7.1	-	27.8	-	6.2	3	-	-	-	-	-	-	-	-	
	21-END	16.6	-	6	3	10.3	5.1	7.7	-	3.5	26	0	33	-	2	-	-1.5	23	2	9.8	-	76.7	-	5.0	3	-	-	-	-	-	-	-	-	
	MONTH	53.4	99	17	11	8.5	3.8	6.2	-2.3	0.3	7	0	60	44	2	-	-2.9	18	9	7.7	-2.3	176.2	99	7.2	11	65	-	-	-	-	-	-		

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TABLE 2 GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	162.60
	11-20	104.50
	21-end	157.17
	Month	424.27
Dublin Airport Co. Dublin	1-10	125.78
	11-20	92.17
	21-end	158.69
	Month	376.64
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	158.44
	11-20	130.02
	21-end	173.11
	Month	461.57
Kilkenny Co. Kilkenny	1-10	135.18
	11-20	105.97
	21-end	161.12
	Month	402.27
Belmullet Co. Mayo	1-10	149.44
	11-20	117.21
	21-end	138.73
	Month	405.38
Clones Co. Monaghan	1-10	139.13
	11-20	94.62
	21-end	135.98
	Month	369.73
Birr Co. Offaly	1-10	130.75
	11-20	96.54
	21-end	152.18
	Month	379.47

Notes on the tables in January issue

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

STATION	PERIOD	SOIL MOISTURE (mm)			
		P.E. (mm)	Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-10	17.4	10	10	-
	11-22	10.5	-	0	32
	23-end	16.2	12	12	-
	Month	44.1	-	-	-
Kinsealy Co. Dublin	1-10	12.4	5	5	-
	11-20	11.4	-	0	19
	21-end	17.0	7	7	-
	Month	40.8	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	8.7	5	5	-
	11-20	18.3	-	0	22
	21-end	15.0	-	0	22
	Month	42.0	-	-	-
Ballinamore Co. Leitrim	3-10	7.9	7	7	-
	11-20	14.6	-	0	35
	21-end	15.7	-	0	9
	Month	38.2	-	-	-
Glenamoy Co. Mayo	1-10	15.0	11	11	-
	11-20	8.4	-	0	42
	21-end	9.7	-	0	47
	Month	33.1	-	-	-
Johnstown Castle Co. Wexford	1-10	12.7	6	6	-
	11-21	19.3	-	0	27
	22-end	10.0	3	3	-
	Month	42.0	-	-	-

TABLE 4 SOIL CLIMATE (MULLINGAR)

BARE SOIL TYPE	PERIOD	MEAN TEMPERATURE (°C at 100mm)			TEMPERATURE GRADIENT (to 200mm)	SOIL WATER POTENTIAL (hPa) (at depths)	
		Max.	Daily	Min.		75mm	200mm
		Peat	1-10	6.8	4.7	3.1	+0.1
	11-20	7.1	5.6	3.8	+0.1	N/A	65
	21-end	10.0	7.8	5.4	-0.3	N/A	63
Mineral	1-10	7.9	4.9	2.3	+0.2	N/A	81
	11-20	8.2	5.7	3.7	-0.1	N/A	87
	21-end	11.4	8.0	5.2	-0.4	N/A	78

special topic

THE COLD SPRING SEASON OF 1986

Weather conditions vary from year to year. Rarely if ever do they follow the climatological norm. The very cold conditions during the first four months of 1986 were particularly difficult, not only because of the unusually persistent cold spell but also because such harsh conditions succeeded one of the wettest summers in recent memory. The resultant scarcity and poor state of cattle fodder, e.g. hay and silage, led to much stress on animals over winter and spring, especially as the anomalously cold conditions continued throughout April.

The figure below shows the five-day mean soil temperatures at 100mm depth during the period January to April 1986 at Birr. These can be compared to the long term average values. From the average trace it can be seen that following the minimum soil temperature in January and early February a recovery takes place in subsequent months. In particular the 6°C soil temperature corresponding to the start of grass growth is normally reached about mid-March.

The soil temperature in January 1986 was below average at the beginning of the year. A warm spell set in after the first week and for the next two weeks temperatures were above normal (8-22 Jan). A long cold spell set in which progressively became more intense during February. The coldest conditions occurred in the final days of February and the first days of March, and there was a slow recovery subsequently. A second warm spell occurred during the middle two-week period, 4-16 March, at which time the conditions for the beginning of grass growth were a little ahead of average. The warm spell was short-lived, however, and a late cold spell set in again interrupting growth. As April unfolded the cold spell became persistent. Instead of the normal recovery in soil temperatures one expects with the increasing length of day, values remained low so that little or no grass growth occurred. With the onset of mild air during the last ten days of April a recovery was made in soil temperatures, although they were still below normal at the end of the month.

Because of the relationship between temperature and plant growth, degree day accumulations are also useful to help quantify the accumulated energy of a season. For values of degree-day accumulations at Birr, base 0.0°C, the persistent cold weather represented a loss of 29 days over the period November 1 to April 27. From January 1 to April 27 the loss was 24 days and from February 1 the loss corresponded to 21 days behind the average year.

T Keane
Meteorological Service

