



(STUDIES OF OREGON'S CLIMATE FOR THE FOREST INDUSTRY)

CLIMATOLOGICAL NOTE NUMBER 28

SEPTEMBER 1960

FREQUENCIES OF AMOUNTS OF DAILY PRECIPITATION IN NORTHWEST OREGON (CLATSKANIE, OTIS, FOREST GROVE)

Question: "During a given 10-day period in Northwest Oregon, what is the likelihood that precipitation during a day will be light, medium, or heavy?"

Table: As an example of how to read the Table, look at the top row of numbers for the period 1-10 January. The values tabulated are based on actual observations made at the stations indicated during the years 1949-58, and are presented on the basis of "days in 100 days". The numbers 0, 1, 2, and 3 above the columns stand for amount of precipitation as follows:

0	no precipitation	
1	light precipitation	Trace through 0.09 inch
2	medium precipitation	0.1 through 0.49 inch
3	heavy precipitation	more than 0.49 inch

That is, during the first third of January at Clatskanie, rainless days have occurred at the rate of 27 days in 100 days, and light precipitation has fallen at the rate of 20 days in 100 days. Combining these two statements, precipitation at Clatskanie during the period has been either absent or light on 27+20, or 47 days in 100 days. This last value for Otis is 20+15, or 35 days in 100 days, and at Forest Grove, it is 26+31, or 57 days in 100 days. Conversely, at Forest Grove precipitation rate has been medium or heavy on 100 - 57, or 43 days in 100 days during the first third of January. Similar combinations of data may be made with respect to various intensities of precipitation at other times of the year.

The data: Because of the nature of precipitation, tabulations here cannot be considered any more than a suggestion of patterns in time and space of precipitation occurring on a given day in Northwest Oregon. Note that "precipitation" includes rain, snow, hail, and sleet expressed in terms of water equivalent. Similar data for Portland, Salem, and Tillamook are available in detail as Climatological Notes 14, 15, and 35 of this series.

William P. Lowry,
In Charge, Forest Meteorology

OREGON FOREST RESEARCH CENTER

FOREST LANDS RESEARCH

CORVALLIS

Daily Frequency of Precipitation as Days in 100 Days in Northwest Oregon.

Period		Clatskanie				Otis				Forest Grove			
		0*	1	2	3	0	1	2	3	0	1	2	3
Jan.	1 - 10	27	20	41	12	20	15	35	30	26	31	31	12
	11 - 20	22	23	34	21	13	16	31	40	24	20	33	23
	21 - 31	27	22	34	17	22	16	44	18	25	27	34	14
Feb.	1 - 10	33	18	38	11	27	17	36	20	28	30	28	14
	11 - 20	29	13	39	19	17	17	43	23	29	28	31	12
	21 - 29	37	16	35	12	30	15	32	25	25	28	20	17
Mar.	1 - 10	40	12	29	19	25	17	38	20	35	25	27	13
	11 - 20	34	22	36	8	26	19	33	22	38	26	25	11
	21 - 31	26	17	44	13	19	16	42	23	27	30	37	6
Apr.	1 - 10	51	20	23	6	44	19	27	10	52	29	15	4
	11 - 20	56	10	25	9	48	12	29	11	54	24	20	2
	21 - 30	51	20	25	4	45	16	29	10	51	33	14	2
May	1 - 10	58	21	17	4	47	28	16	9	55	29	14	2
	11 - 20	62	14	22	2	52	21	22	5	57	28	15	
	21 - 31	61	19	16	4	49	20	23	8	57	25	18	
June	1 - 10	58	24	16	2	43	28	16	13	60	26	14	
	11 - 20	62	18	18	2	43	24	24	9	56	29	11	4
	21 - 30	54	25	20	1	43	31	23	3	66	21	13	
July	1 - 10	84	8	8		61	22	16	1	79	15	6	
	11 - 20	86	7	6	1	71	19	7	3	91	6	3	
	21 - 31	86	9	4	1	74	18	7	1	90	7	3	
Aug.	1 - 10	78	12	9	1	72	15	12	1	84	13	3	
	11 - 20	83	11	6		68	21	11		85	12	3	
	21 - 31	69	12	17	2	62	16	17	6	73	17	9	1
Sept.	1 - 10	77	16	5	2	66	20	12	2	82	13	3	2
	11 - 20	73	10	15	2	55	25	15	5	69	18	10	3
	21 - 30	63	16	17	4	50	26	16	7	64	22	8	6
Oct.	1 - 10	48	11	28	13	35	21	22	22	47	19	24	10
	11 - 20	56	10	25	9	40	24	25	11	52	22	22	4
	21 - 31	50	6	32	12	32	23	24	21	48	19	27	6
Nov.	1 - 10	55	12	25	8	48	16	27	9	52	21	22	5
	11 - 20	23	27	34	16	18	19	37	26	23	30	28	19
	21 - 30	37	9	43	11	31	14	31	24	39	20	26	15
Dec.	1 - 10	19	11	37	33	16	13	41	30	16	24	39	21
	11 - 20	34	10	38	18	18	22	31	29	31	20	36	13
	21 - 31	26	18	37	18	16	21	37	25	29	28	26	17

* 0, no precipitation; 1, through 0.09 inch; 2, 0.1 through 0.49 inch; 3, more than 0.49 inch.