STUDIES OF OREGON'S CLIMATE FOR THE FOREST INDUSTRY)

FREQUENCIES OF DAILY MINIMUM RELATIVE HUMIDITY AT PENDLETON, OREGON

Question: "During a given 10-day period at Pendleton, what is the likelihood that the minimum relative humidity observed during the day will be a certain value?"

Table: As an example of how to read the table, look at the row of figures for the period 1-10 January. The figures tabulated are based on the actual observations made at Pendleton during the years 1948-58, and are presented on the basis of "days per 100 days". That is, during the first third of January daily minimum relative humidity in the 40's (40% to 49%), has been observed at the rate of 15 days per 100 days. During the same period minimum R. H. in the 30's has occurred at the rate of 10 days per 100 days, and in the 20's at the rate of 2 days per 100 days. Combining these statements one may compute that during the first third of January daily minimum R. H. between 19% and 50% has been observed at the rate of (15+10+2), or 27 days per 100 days. Similar combinations of data may be made with respect to other ranges of minimum R. H. and other periods of the year. The last column of the table gives the information that, on the average, a day in the first third of January will experience a minimum relative humidity of 61.6 per cent.

The data: One must keep in mind that the observations of daily minimum R. H. in the table were made at the U. S. Weather Bureau Station at Pendleton Field. Since for a given sample of air the relative humidity changes when temperature changes, it is quite likely that differences in the daily minimum R. H. between various locations in the Pendleton area occur, especially on days when temperature differs from place to place. The values in the table, therefore, should be considered only a suggestion of the time and space patterns of minimum R. H. Even so, the table will give the user a good idea of how likely various daily R. H. minima are during various times of the year in the Pendleton area.

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DAILY MINIMUM RELATIVE HUMIDITY AT PENDLETON, OREGON........FREQUENCIES IN DAYS PER 100 DAYS

		0-9 %	10-19 %	20-29 %	30-39 %	40-49 %	50-59 %	60-69 %	70-79 %	80-89 %	90-100 %	Daily mean %
January	1-10			2	10	15	19	27	7	13	7	61.6
	11-20				2	20	34	19	18	5	2	60.1
	21-31			1	4	16	22	32	21	3	2	61.1
February	1-10			1	5	22	31	16	6	10	9	60.7
	11-20			2	12	28	24	16	9	9		55.3
	21-29			6	12	37	22	13	4	6		50.0
March	1-10			9	25	25	22	10	6	3		46.9
	11-20			8	32	40	14	5		1		42.1
	21-31		1	18	36	29	9	5	2			39.8
April	1-10		3	34	39	19	1	2	2			33.9
	11-20		12	33	33	14	6	1	1			32.8
	21-30		11	28	41	12	6	2				32.4
May	1-10	1	6	36	24	15	13	3	2			35.1
	11-20		13	37	24	14	5	5	2			33.0
	21-31		15	38	25	17	5					30.6
June	1-10	1	15	27	39	6	7	4			1	32.1
	11-20	1	25	29	26	10	6	3				29.7
	21-30	2	25	40	25	4	3	1				26.5
July	1-10		43	37	17		2	1				22.4
	11-20	2	49	41	8							20.0
	21-31		63	25	12							18.9
August	1-10		37	41	18	3						22.5
	11-20	2	41	36	18	2	1					22.4
	21-31	1	25	43	21	7	2		1			26.4
September	1-10		34	45	14	5	1	1				23.9
	11-20	1	24	41	23	7	4	1				27.4
	21-31		15	38	30	11	4	3				30.4
October	1-10		4	18	35	19	14	8	1	1		40.0
	11-20		2	13	30	16	22	13	3	1		44.1
	21-30		1	4	25	41	16	5	5	2	2	46.8
November	1-10			3	12	37	20	14	8	5	1	52.0
	11-20	2	1	1	12	23	21	22	10	6	2	54.7
	21-30			4	7	16	24	13	9	18	9	62.7
December	1-10			1	9	20	31	18	8	10	3	57.9
	11-20				2	14	18	23	15	20	8	67.2
	21-31			3	9	14	27	19	14	8	6	60.6