

May 17

? WHY THE WEATHER ?

Dr. Charles F. Brooks,
of Clark University,
discusses:

DEW SIGNS

"When the grass is dry at morning light

Look for rain before the night."

"When the dew is on the grass

Rain will never come to pass."

Dr. W. J. Humphreys of the Weather Bureau has collected and illustrated many old adages. He shows that while some weather proverbs are based on mere superstition or tradition, others such as this one are of real value, because founded on sound principles.

Dew forms typically on clear, cool nights. Some water vapor is always present in the air, or we might say, in the space about us, because water vapor pays no attention to the other gases, and acts just as if they were not present. When water vapor is chilled below the "dewpoint" it can not all remain in a given space, but some condenses as small drops of water. On clear, calm nights, especially when the air is dry, leaves and grass near the ground lose heat rapidly and become relatively cold. Water vapor in contact with them then becomes chilled and condenses on the cool surfaces, so that in the morning we find dew. A cloudy sky with much water vapor in the air, conditions favoring rain, will give back to the earth much of the heat which it is radiating and will prevent the surface of the ground from becoming so cool. Then dew will not form. Similarly, wind at night, such as might accompany an approaching storm will keep the air stirred up and will prevent the small local chilling near the ground which produces the dew.

The presence of dew in the morning then, follows a night with dry, calm air and a clear sky, typical fair weather conditions, while the absence of dew indicates damp, cloudy or windy weather. Hence:

When the morn is dry

The rain is nigh,

When the morn is wet

No rain you get.

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