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? WHY THE WEATHER ?

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DEW

The couplet in Shelley's poem "The Cloud" reading

"From my wings are shaken the dews that waken
The sweet buds every one"

may be good poetry but it is poor science. Dew is not shaken from the clouds. Neither does it fall from the sky. Thanks to one of Shelley's contemporaries, Dr. Wells (who was born in Charleston, South Carolina, but spent most of his life in Great Britain), we know that it is formed directly from the air at the place where it is deposited, and we know, also, how this comes about.

When air is warm it can contain a large amount of water in the form of an invisible gas called "water vapor." When it is cold it can hold but little of this gas. Hence cooling the air, if carried far enough, causes some of the contained moisture to change from a gas to a liquid. An ice pitcher cools the air in contact with it, and thus becomes coated with visible moisture. This so-called "sweating" of cold objects in the daytime is really dew.

At night objects out of doors are generally more or less cooled by radiation. If they grow cold enough and there is considerable water vapor in the air adjacent to them, some of this vapor becomes liquid water, just as happens in the case of the ice pitcher. This is the common outdoor form of dew.

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