

CHATS WITH THE WEATHER MAN

Friday, August 5, 1932.

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Speaking Time: 10 Minutes.

ANNOUNCEMENT: Now let's talk about the weather. As a result of our chat with one of the weather men of the United States Weather Bureau, we have picked up some information about weather signs that sounded interesting to us. We hope it will sound that way to you -----

You know our United States Weather Bureau forecasters base their predictions on weather reports gathered by wire and radio from all over ----- not only all over this country, but all over this continent, and pretty much all over this Hemisphere.

The forecasts based on those reports are made from a considerable spread of country, such as a whole State. Often those forecasts are expressed in rather general terms, but some of our weather, especially in the summer time, is very local in its character. Of course, where there is a local Weather Bureau station, we usually rely upon the forecaster to also supply a local forecast. But some folks are located at some distance from a Weather Bureau office. By radio they get the more general forecasts. These forecasts tell what is likely to happen most places in that forecast area. However, for the strictly local weather, some folks still make their own rough forecasts based on some age-old sign or weather maxim.

Some even seriously note the way the horns of the new moon tip as a sign of rainy or dry weather. That wet and dry moon business is all poppycock, Dr. W. J. Humphreys, of the United States Weather Bureau, tells me.

But he says there are some of the old sayings that do have some value. For instance, there is the old rhyme about dew and dry weather:

"When the dew is on the grass
Rain will never come to pass"

That is sound meteorological physics. Dr. Humphreys says the state of the dew in the morning is one of the very best indicators of the weather for the day. As he explains, dew gathers on grass and other exposed objects when they cool enough to condense the moisture out of the air, just as moisture collects out of the air onto the side of a pitcher filled with ice water.

The dew gathers on the grass when the grass cools considerably. Dr. Humphreys says that only happens on still, clear nights; on the kind of night we have during a spell of fine weather. So a heavy dew on the grass means that the air was still and the sky clear, at least during the latter half of the night. It is pretty certain if we had neither wind nor clouds during the latter half of the night, the day will be a good one for all outdoor work. Or in other words,

"When the dew is on the grass
Rain will never come to pass."

On the other hand, as the other old proverb goes;

"When the grass is dry at morning light
Look for rain before the night."

That is, if there is no dew on the grass in the morning, it is almost certain that either the sky was clouded or that there was some wind, or both. Well, Dr. Humphreys says both cloudy sky and wind usually precede a general rainstorm by 6 to 12 or even 24 hours, according to the circumstances. So the old saying is not far off:

"When the grass is dry at morning light
Look for rain before the night."

And here is another rain rule that has come down through the years in a rhymed couplet.

"In the morning mountains,
In the evening fountains."

Dr. Humphreys translates that as merely a poetical way of saying that when you see a lot of big cumulus or woolpack clouds in the forenoon you are likely to get a thunderstorm in that locality before nightfall. He explains that those big cumulus or woolpack clouds are caused by surface heating. They are likely to get bigger during the day as the surface heating goes on. By midafternoon one of them here and another yonder usually grows into a thunderstorm with plenty of rain. So the man who wrote those lines expressed a sound meteorological truth.

I guess all of us have heard some of the old weather sayings about sun sets. You remember the maxim:

"If the sun set in gray
The next will be a rainy day."

Dr. Humphreys says that is a pretty good guess, too. As he points out, a gray sky is one overcast with a high thin cloud, or just the kind of cloud that runs well ahead of a general rainstorm. At such times, this meteorological physicist observes, the clouds commonly grow darker and denser until within 6 to 24 hours it begins to rain.

Then there is the old saw which lays down the rule that when the sun sets in a clear sky the next day is likely to be fair. Or, as Shakespeare made one of his weather-wise characters say:

"The weary sun hath made a golden set
And by the bright track of his fiery car
Gives token of a goodly day tomorrow."

That is as true here today as it was in England some 350 years ago when Shakespeare wrote it. Dr. Humphreys says the reason it is so is because it is

fair weather at the time of the sunset, and fair weather usually lasts two or three days at least and generally longer than that in the summer and fall, when that saying probably got started.

Speaking of showers, however, reminds us of some of those poetical rules for forecasting from rainbows. You know the old one about:

"A rainbow in the morning
Is the shepherd's warning;
A rainbow at night
Is the shepherd's delight."

"Night" of course as used in this bit of meteorological verse does not mean after dark, but late in the afternoon. The idea is that a rainbow in the morning is the shepherds' warning of showers later in the day, and a rainbow in the afternoon is a forecast of fair weather. But Dr. Humphreys warns us that is not a very reliable sign. However, he admits it is worth something.

As he explains, we see a rainbow only in a local shower of the thunderstorm type, caused usually by surface heating. If one of those local thunderstorms happens in the early forenoon, it certainly must not have taken much sunshine to start it, and there is likely to be enough sunshine later in the day to cause other showers. On the other hand, if the thundershower doesn't happen until late in the afternoon, that thundershower must have been rather hard to start, and others are not likely to follow that night nor even the next day.

Besides that, Dr. Humphreys says the shower that gives a rainbow in the morning is west of the observer. That is, it is always on the other side from the sun. In the case of an evening rainbow, the thunderstorm is to your east. Since those storms nearly always travel from west to east, a morning rainbow indicates that that shower, at least, is coming. An evening rainbow is evidence that the rain producing it is going farther and farther away and will not come back.

Dr. Humphreys says sometimes the stars also give excellent hints of tomorrow's weather. When they seem exceptionally bright and you can see a lot of them, you know there is not much moisture in the air. Chances are the next day will be fair. But if the stars are dim and growing dimmer, you know that high thin clouds are gathering. Those are the clouds that go before a rainstorm, so chances are the next day will be a rainy day; or, as the old proverb puts it:

"When the stars begin to hide
Soon the rain will betide."

Those are just a few of the old sayings that have real weather lore behind them. Those apply most anywhere. Dr. Humphreys mentions others that differ in different countries and in different parts of the same country. Some first-rate weather signs in the mountains do not occur on the plains. Some on the plains are unknown in the mountains. To be your own best forecaster, you need to know intimately the region for which you are forecasting.

ANNOUNCEMENT: We will have another chat with the Weather Man two weeks from today. These bi-weekly talks are presented by Station _____ in cooperation with the United States Department of Agriculture, of which the Weather Bureau is a part.

National Oceanic and Atmospheric Administration

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July 23, 2010