

My interest in weather started when I was very young and while it's difficult to point to one incident or one facet of nature that developed my weather interests, I vividly recall a funnel cloud hanging over the street in front of my house when I was a child back in 1969. I also remember images of the blizzard of 1967 in the Chicago area (though I was only 5 years old). I have many memories of hot summer days, billowing clouds that developed in the thunderstorms, and brilliant flashes of lightning as big thunderstorms pounded my neighborhood. All of these things played a part in my love of weather, but they weren't the only things. As a child, I found just as much fascination in reading books about weather.

One of my favorite books, though I don't remember the title, was a book that featured numerous weather proverbs. It was always fun to read the proverb, and then watch the skies to see if the weather really changed as the proverb suggested. Proverbs...which are just brief poems or sayings that contain popular beliefs...are not true all the time, but they do work in many situations and do make sense meteorologically speaking. In this article I analyze two of the more common sayings and I have provided links below to many weather more weather proverbs.

This is probably the most popular weather proverb I have heard:

***“Red Skies at Night, Sailors Delight
Red Skies at Morning, Sailors take Warning.”***

There are other versions of this proverb, but the one above is most commonly quoted. Okay, so what does it mean, and does it work in the real world? First of all, the proverb refers to *night*, and *morning*. In this case *night* means sunset, and morning means *sunrise*. Because of the way our atmosphere filters sunlight, you generally won't see red skies during the middle of the day. However, when the sun is low in the sky, such as at sunrise and sunset, light from the sun gets filtered by our atmosphere, and the shorter wavelengths of blue and green get scattered (blocked or reflected) more easily (that's why we have blue skies). The longer wavelengths of red and orange are then allowed to pass through the atmosphere where they highlight clouds and the sky on the horizon near sunrise and sunset. If the air is unusually clean and the sky has few or no clouds, you will only have faint colors at sunrise or sunset, but our atmosphere always has particles of dust or salt or smoke that catch the pretty reds and oranges. However, when there is a brilliant red / orange sky, it is generally because of the sun's light reflecting off of clouds, and that has meteorological significance.

In the evening, the sun sets in the west, which means that its light is shining east, so the red skies will be east of the setting sun (over our heads and behind us as we face the sun). That tells us two important things. First, there are no clouds on the distant horizon to block the sun's light, and secondly, there are no storms between us and the setting sun, so quiet weather will likely continue through the night and into the next day, if not longer. Therefore, any clouds reflecting the

orange and red rays of the setting sun are producing a pretty scene, but typically nothing more...and so we have, "Sailors Delight".

In the morning, the sun rises in the east and the longer orange and red wavelengths are shining west, so if the sky is red / orange, the clouds reflecting those colors are overhead or to the west, and are probably coming our way. It's not always the case that those clouds will produce rain or snow, but increasing clouds are certainly a sign of change. For mariners, those signs are important since they may need to get to safe harbor or prepare for storms at sea, so "Sailors take Warning".

In my experience, this proverb is fairly reliable, so keep an eye on the colorful skies. It's interesting to note that most weather proverbs came from mariners and farmers...the people most directly affected by weather changes. Here are a few examples:

Mackerel Skies and Mares' Tails make Tall Ships take in their Sails.

Or this:

***Seagull, seagull, sit on the sand,
It's a sign of rain when you are at hand.***

Or check these out when you're visiting a farm:

When the rooster goes crowing to bed, he will rise with a watery head.

When the goose honks high, fair weather is nigh.

Here's another one that I like, with a brief analysis of its meaning.

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

This one talks about clouds and in particular, cumulus clouds. I used this one a lot when I was a kid, and it's still valid now. Cumulus clouds can tell you a lot about the state of the atmosphere. These puffy white clouds are often associated with fair weather, but if they start getting taller in the morning, it's a sign of an unstable atmosphere. If the clouds continue to grow larger, they will produce showers and thunderstorms by mid afternoon or early evening. The timing of any storms will vary, and sometimes cumulus clouds will build without any rain falling, but if you see building clouds, especially in the early to mid morning, there's a good chance you'll get those *evening fountains*.

Enjoy the links and enjoy the changing weather...

<http://www.ea.pvt.k12.pa.us/html/Units/IsDevon/DFormSS/weathersayings.htm>

<http://www.cmos.ca/weatherlore.html>

http://www.math.montana.edu/~nmp/materials/ess/russian/int_weather/proverbs/proverbs.html

http://www.boatsafe.com/nauticalknowhow/weather_proverbs.htm

<http://www.phrases.org.uk/meanings/red-sky-at-night.html>