

WEATHER...Whether you like it or not

The weather is important to every one of us and although we cannot do anything to change it we will complain about it when we don't like it or if it interferes with our plans. For centuries, before there were weather tools such as Doppler Radar® or even the mercury barometer or thermometer, people looked to the sky, plants, and animals for hints about what the weather might be on any given day or in the near future. To remember these items or indicators, people made up weather sayings which often were in the form of rhymes, anecdotes, adages or poems. Farmers and gardeners as well as sailors and fisherman were among the first to try to track weather using what today we call folklore. Even today's *Farmer's Almanac* will often include some of the following historical observations of nature:

- "Bees will not swarm before a storm"
- "When the sun sets bright and clear, an easterly wind you need not fear"
- "Rain before seven, clear by eleven"
- "Red sky at night, sailor's delight, Red sky at morning, sailors take warning"
- "Aching joints foretell wet weather"
- "If autumn leaves are slow to fall, prepare for a cold winter"
- "If March comes in like a lion, it will go out like a lamb"

Today's meteorologists would likely agree that nature does provide us with some fairly accurate weather indicators if they are based on observing sky colors and clouds, wind movements and some animal behaviors.

Some people use the terms weather and climate interchangeably but that is wrong. The difference between these two terms is the amount of time. Weather generally refers to day-to-day temperature and precipitation activities whereas climate is what happens in our atmosphere over several years. When people talk about climate change they should be referring to changes in long-term averages of daily weather patterns. Over the past several years debate over "global warming" has been about climate change not about weather.

The air around our planet Earth is called our atmosphere and scientists divide it into layers. It is our atmosphere that protects Earth from extreme temperatures and also provides the stage for dramatic weather events. Our weather happens in its bottom six to ten miles thick layer which is called the troposphere (thickest at the equator and thinnest at our poles). Essentially weather is a description of the basic elements of the air at a particular place and time on our globe...whether it is warm or cold, wet or dry, calm winds or stormy, cloudy or clear of clouds. The two main features that combined to create most of our weather are the sun and the amount of moisture in the air.

The amount of variance in our weather and in the four seasons depends on where you are located (latitude) on planet Earth. The largest influence in our weather is the sun because the amount of sunlight a location receives will determine its climate and the qualities of its seasons. Generally speaking the closer you are to the Earth's equator the more hours and days you will have of sunshine throughout the entire year. Land heats up faster than water. This unequal heating is the basis for variations in temperatures, air pressure, winds and ocean currents. The strong temperature contrasts between polar and tropical air gives rise to what is known as the jet stream. The amount of solar energy received at any location on Earth will affect the amount of precipitation, condensation and evaporation.

U.S. citizens seem to be more tuned in to weather forecasts than others around the world. One of the reasons may be that the United States experiences more severe storms than any other country in our world. In an average year this will include 10,000 violent storms, 5,000 floods, and 1,000 tornadoes. No wonder there is always something interesting to hear in the daily weather report via the media. In our region the most common forms of storms are thunderstorms, snowstorms including blizzards, wind storms and tornadoes.

Meteorology is the study of the changes in temperature, air pressure, wind direction/speed and moisture whereas meteorologists are people who specialize in the study and forecasting of weather. But it is not an exact science and most of us will remember the times the meteorologist was wrong. Some even think that a meteorologist is one who uses reverse psychology with Mother Nature....as when he/she says it will rain, it won't! And some of us believe that if we take an umbrella to the ballgame it will improve the likelihood that it will not rain. Meteorologists have actually increased the accuracy of their weather forecasts in the last twenty years due to advances in radar, satellite technology and the use of data via computer programs. Today when we watch the weather portion of the news on television it is common to see a seven day forecast.

You can ask your weather questions of TV 5 Weather Specialist Eric Jyhla at the Friday, March 18, 2011 "Bits and Bites" program sponsored by the Delta College *50+...Just Like Gold Program*. Every month these sessions (the format is a bit of information along with a bite to eat) introduce topics of interest to the 50+ population. Advance registration is requested so we can have an accurate food count. Join us as we talk about the weather and look forward to all the promises of the spring season.

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