

THE FACTS

BEHIND THE FOLKLORE

Scientists now—finally—
admit that many weather proverbs
are TRUE!

Weather proverbs—the delightful, often rhyming, couplets and colorful statements that typically link a natural event with a meteorological condition—originated centuries ago when people watched the skies, oceans, plants, and animals for clues of what to expect weatherwise. Here's why we, too, can rely on these age-old adages.

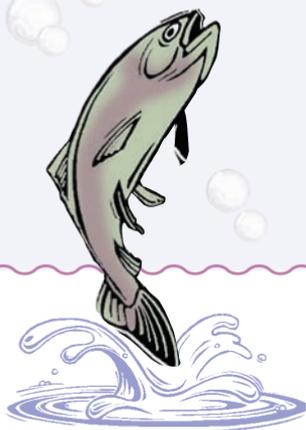


PROVERB:

*Fish bite
more before
a storm.*

WHY

Topper Shutt, chief meteorologist for WUSA-TV in Washington, D.C., claims that the experienced fishermen he knows swear by this adage. As a low-pressure system moves across an area, air rises and cools, water vapor present in the system condenses, and rain or snow usually follows. The lower barometric pressure releases gas bubbles that cling to decaying matter at the bottom of streams and rivers. The bubbles rise to the surface, carrying the decaying matter with them. The bubbles rise to the surface, carrying the decaying matter with them. Small fish follow the particles to feed on *them*. Big fish follow the little fish to feed on *them*, and, in the end, the fishermen are the winners.

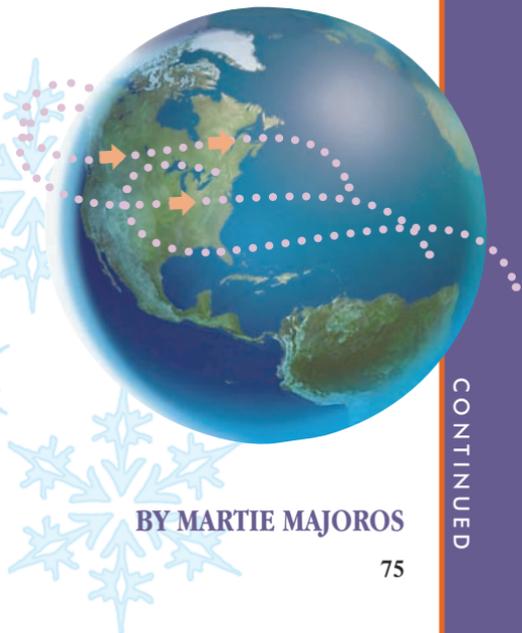
**PROVERB:**

*If there is thunder in winter,
it will snow 7 days later.*

WHY

According to Shutt, this is true about 70 percent of the time, especially from the East Coast to the Plains. Thunder in winter is an anomaly often caused by a big dip and a big rise in the jet stream (a powerful wind current that acts like railroad tracks, guiding high and low pressure systems from west to east across North America and separating cold air in the north from warm air in the south). As cold air moves south, it replaces warm air and lifts it up, often

causing thunderstorms. The cold air behind the front settles in. Depending on the strength of the front, it may hang around for many days. When the next weather system arrives several—if not exactly 7—days later, temperatures may still be cold enough to cause the moisture in the system to fall as snow.



BY MARTIE MAJOROS

Weather

PROVERB:

Silver maple leaves turn over before a storm.

WHY

John Fuller, chief meteorologist with KPLR-TV in St. Louis, Missouri, explains that before the arrival of a cold front, surface winds usually blow from southeast to southwest. As the front approaches, the wind shifts direction, becoming north to northwest. The unsettled winds that occur with the front flip the leaves to reveal their undersides. Silver maple leaves, more than many other leaves, turn over easily in the wind because they are broader and catch the wind more easily than smaller leaves, and their long stem allows them to twist easily in the wind.



WHY

Morning dew is a sign that the previous night's skies were clear, with no wind and decreasing temperatures. Clear, dry, windless conditions usually continue through the daytime. David Phillips, senior climatologist with Environment Canada, claims that this proverb is about 75 percent accurate.



PROVERB:

Wind in the east, good for neither man nor beast.

WHY

During summer and winter in mid-latitude regions, the prevailing wind blows from the west. When the wind comes from the east, a low-pressure system accompanied by precipitation usually follows. The belief behind this proverb dates from ancient Romans who would not conduct official business when the wind blew from the east. They thought that it made people more irritable and unsettled.

PROVERB:

When dew is on the grass, rain will never come to pass.

PROVERB:

Cream and milk, when they turn sour in the night, often indicate that thunderstorms are about.

WHY

Before homes had refrigerators, cream and milk were often left out overnight. In winter in cold climes, this was seldom a problem. However, during summer's hot, humid nights, unrefrigerated dairy products often soured. The same hot, humid weather that spawns thunderstorms can cause bacteria in unrefrigerated milk to increase, causing it to sour and curdle. The coincidence was taken as a sign.



PROVERB:

*A ring around
the Moon means
rain will come
real soon.*

WHY

A ring, or halo, around the Moon is caused when the light of the Moon refracts through ice crystals present in high-level clouds. Although these clouds do not produce precipitation, they often occur in advance of an approaching low-pressure system, which often brings precipitation in the form of rain or snow.

PROVERB:

A year of snow, crops will grow.

WHY

A several-inch layer of snow contains more air than ice. Trapped between the interlocking snowflakes, the air serves to insulate the plants beneath it. When the snow melts, the water helps to keep the ground moist.



Weather clues are all around us. There are no real surprises, says Environment Canada's Phillips. Before a tornado, for example, the sky may turn green and the approaching wind might sound like a train at a distance. Here are a few clues to making your own predictions:

■ **PAY ATTENTION TO WINDS AND CLOUDS.**

These are the big predictors of changes in barometric pressure and resulting weather. For instance, the adage "No weather is ill, if the wind be still" indicates a high-pressure system, a broad area of descending air characterized by calm winds and little cloud formation.

■ **LISTEN.** Gordon Restoule (see page 78) lives with waterfalls to the south and train tracks to the north. When he hears the falls, he knows that it's going to be warm because the sound is carried on a south wind. When he hears the trains, he expects cold because that sound is carried on a north wind.



Weather

■ **OBSERVE SHEEP, CATS, AND COWS.** Their bodies are affected by changes in air pressure. When rain is on the way, old sheep turn their backs to the wind, cats sneeze, and cows lie down.

■ **WATCH BIRDS IN FLIGHT.** Air pressure affects many birds. For example, swallows have sensitive ears; when the barometric pressure drops, they fly as close to the ground as possible, where air density is greatest. Generally, low-flying birds are signs of rain; high flyers indicate fair weather.

Martie Majoros lives in Burlington, Vermont, where she tries to demystify meteorology by watching weather systems as they move across Lake Champlain.



BEWARE OF

FICKLE FORECASTS

GORDON RESTOULE has lived on the Dokis First Nation Reservation on the French River near Sudbury, Ontario, for 73 years. His father and grandfather taught him how to watch the animals and the skies and use his observations to predict the weather. For most of his life, his interpretations have been nearly 90 percent accurate.

Now Restoule claims that climate change is interfering with nature and the traditional habits of some animals. As a result, some proverbs have become unreliable. For example, years ago, if Restoule heard owls in a swamp at night, he was reasonably confident that rain was coming ("A screeching owl indicates cold or storm"). Now, he hears them so frequently that he claims that they don't signify anything.



Also, at one time deer would head for cover among low-branched trees such as hemlocks and pines during a cold spell or in advance of a storm. Now, Restoule says, deer gather under hardwood trees with higher canopies, such as oak, which do not provide as much protection. He attributes this change to warmer winters.

SIMILARLY, David Phillips of Environment Canada warns of far-forward-looking weather proverbs based on animal and plant activity. They are seldom reliable indicators of future conditions. For instance, predictions based on squirrels gathering nuts ("When squirrels lay in a large supply of nuts, expect a cold winter") or onion skins' quality ("Onion's skin very thin, mild winter coming in; onion's skin thick and tough, coming winter cold and rough") are usually indicators of the previous season's weather.

The same can be said of a heavy crop of acorns. Often, oaks form more acorns if they have experienced stress due to a drought in the previous spring or summer. □□