

From: jim.speirs@canrem.com (Jim Speirs)
To: dannys@iis.ee.ethz.ch (Danny Schwendener)
Subject: Nature's Weather Signs

Article #R147.

=====
Nature's Weather Signs
Linda Florence
The Leader, June/July 1986

On a summer evening before an early morning fishing trip, my father and grandfather ritually sat on the stoop of the old shed checking and choosing their tackle. My grandfather was not a talkative man, and the time passed in companionable quiet which we had learned not to disturb.

"Guess that's it," grandpop would finally say.

"What time you want to leave?" dad would ask.

After a pause to scan the sky, my grandfather might reply, "Not too early. We're in for rain, so bring the oilskins." Another time he might suddenly call off the morning trip. "Wind's shifted, " he'd say. "Southeaster coming. May be okay just before supper." As I remember it, he was always right. Soon after he predicted a southeaster, for example, the first tug responded to marine radio storm warnings by mooring at one of the buoys in the shelter of the bay in front of the house.

My grandmother had the same knack. While puttering in the garden, she'd suddenly lift her head and sniff the air. "Smells like rain," she'd say, when all I smelled was the heavy perfume of the blooms she was tending. Inside, she could quash the afternoon's picnic plans with a flat, "There's rain on the way. I feel it in my bones." I learned to respect her predictions, even under a cloudless sky.

Country people who pioneered in our small west coast town, my grandparents were dependent on land and sea and alert to nature's weather signs; a mackerel sky, a counterclockwise shift in the wind, the reactions of animals, earth and their own bodies to increasing humidity and falling barometric pressure. Not only cloud formations and sky colours, but numerous subtle signs that perhaps even they might not readily identify helped them form their predictions.

We can all learn some of nature's weather signs, and summer camp is a great place to begin. Because few of us live as close to the land as my grandparents did, we'll have to work at it, but there are things to look for. Watch and listen, see what happens within 12 hours, and soon you may find you are tuned in enough to say, "It's gonna rain" without even stopping to think why. And you may be right!

Low Pressure Signs

Many animals signal impending rain as they react to falling air pressure, an indication that a storm is moving in. Bats fly lower before storms, and you'll often see crows and robins walking. A drop in air pressure sets wolves howling because it hurts their ears. Ants tend to scurry about and spiders busily repair their webs before a storm, but it's not clear if they are responding to low pressure or high humidity.

Leeches make good barometers. Put a couple of these creatures in a jar and watch their behaviour. If they lie quietly on the bottom of the container, you can count on good weather. If they begin to dash back and forth, the pressure is dropping and you may have rain.

Another sign of low pressure harks back to my grandma's "It smells like rain." Decaying vegetation in soil, pond and marsh forms gases which, under normal pressure, stay put. Low pressure allows pockets of these gases to escape, giving the air an "earthy" smell or, near stagnant water, something less pleasant, as noted in this little rhyme: When the ditch and the pond offend the nose, then look for rain and stormy blows.

Even tree leaves react to a low pressure system. If you listen carefully one quiet evening as you enjoy an after-supper coffee, you might hear slender white pine needles "whistle", coarser thicker pine needles "grumble", and oak leaves "mutter". While you listen, look down at your coffee. Are there bubbles clustered around the edge of the cup? If so, the pressure is low. It's also low if the smoke from your fire is curling towards the ground instead of rising. Now, look up. If there's a ring around the moon as well, you're probably in for rain.

A shift in wind direction indicates a high or low pressure system is moving in. A counterclockwise shift from north to west, for example, is a sign of rain because that's the direction air moves around a low pressure system. If the wind shift is clockwise, it means a high pressure system, and you'll likely be blessed with fine weather.

High Humidity Signs

Rising humidity also signals rain. The ring around the moon or a haze around the sun often means wet weather. When pitcher plants open, humidity is high and rain threatens. Wildflowers like daisies and chickweed close up when the relative humidity near the ground reaches 82%, another rain sign.

Frogs provide storm warnings when they emerge from the water and start croaking as humidity rises. About 12 hours before a storm hits, insects fly lower than usual and seem to swarm more because, when the upper air holds a lot of moisture, it condenses on their wings and hairs and makes flying difficult. Two hours before the storm, they stop flying altogether. Because they chase the insects, birds fly low when the air is moist, too. And fish bite better, perhaps because they're feasting on waterlogged insects lumbering close to the surface. Birds also sing more and fly facing the wind when humidity is high. Ants marching in single file and a night filled with fireflies are other signs of very moist air.

If the cry of the loon that wakes you early in the morning seems much louder than usual, go back to sleep. It's probably going to rain. When you look out, you'll see the glowering low cloud that amplified the loon's call. On the other hand, if the ground is covered with dew when you emerge from the tent, you're probably in for a splendid day. Dew forms when the ground loses heat quickly, and that only happens when the air above is dry.

Finally, if the weather's very hot and you want to know just how hot it is, listen to grasshoppers and crickets. Grasshoppers won't give you a precise reading but, if they are singing, it's above 84 degrees F (29 degrees C). Crickets, they say, can tell you exactly what you want to know. Simply count cricket chirps for 14 seconds and add 40 to

come up with the temperature in fahrenheit. If you prefer centigrade, count the number of chirps in eight seconds and add four. Try it when you're out there, check your results against a thermometer, and tell us if it works.

Oh, by the way, if the crickets quit chirping, they're saying it's either above 105 degrees F (40 degrees C) or below 40 degrees F (4 degrees C). But I expect you'll find it pretty easy to figure which one.