

The Myth of the Woolly Bear

AGRI-VIEWS

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As much as I enjoy folklore and all sorts of old tales of nature, I'm also quick to dispel any long held beliefs in the search for scientific accuracy. If you are a believer in the prognosticative abilities of Woolly Bear caterpillars, you'd better just stop reading now as I get ready to throw that one under the proverbial bus!

For those of you that are not familiar with the folklore, the banded woolly bear caterpillar is supposed to predict what the upcoming winter weather will be like. The woolly bear caterpillar is a fuzzy caterpillar about 1.5 inches long. There are actually four distinct species of uniformly fuzzy, not tufted, caterpillars, that different folks call woolly bears. They are all members of the tiger moth family. In addition to the brown and black banded woolly bear there is also the yellow woolly bear, the salt marsh caterpillar and the giant leopard moth caterpillar. The giant leopard moth caterpillar is solid black and the other two are different shades of yellow. But it's the brown and black one that gathers folk's attention.

The myth has it that the width of the brown and black bands predict the winter weather. The wider the black bands at the end of the caterpillar, the harsher the winter will be, corresponding to the beginning, middle and end of the winter season. A thin black band at the front of the caterpillar is supposed to foretell a mild start to winter. A wide black band at either end indicates harsh winter weather is in store. Of course, if you are looking at a solid black giant leopard moth caterpillar you might want to assume that a winter in south Florida is in order!

The winter prediction myth of the woolly bear dates back to colonial America. I don't know if anyone knows how it happened, but it happened. Then, in 1948, Dr. Charles Howard Curran, a noted entomologist, traveled to a location north of New York City and collected 15 banded woolly bear caterpillars and measured the lengths of the bands. Following the folklore, the caterpillars predicted a mild winter. There is good speculation that Dr. Howard was doing all of this in jest because his announcement was not in a scientific journal, where real research would be reported, but was released to the New York Herald Tribune. The prediction was accurate and the following year everyone demanded another prediction and a myth became a nationwide event!

Dr. Curran, in other writings, acknowledged that the sample size of his little experiment was far too small to be reliable. While the banded woolly bear is found across the continent from coast to coast and from southern Canada down into Mexico, its predictive ability was long ago shown to be wholly inaccurate. However, over the years, as a byproduct of the interest in the woolly bear caterpillar it was discovered that it, along with the giant leopard moth caterpillar, were able to produce antifreeze like chemicals called cryoprotectants to prepare themselves for winter and keep sharp pointed ice crystals from forming inside their bodies.

So what does cause variation in the widths of the black and brown bands of the woolly bear? The variation in the widths of the color bands comes down to several factors including age, food sources and moisture levels in the area where they develop. Whether it's the woolly bear bands, squirrels burying lot of nuts or other such anecdotes in nature, it always comes down to what HAS been, not what WILL be! None the less, it's always fun to keep an eye out and see what the woolly bears in your neighborhood may be predicting!