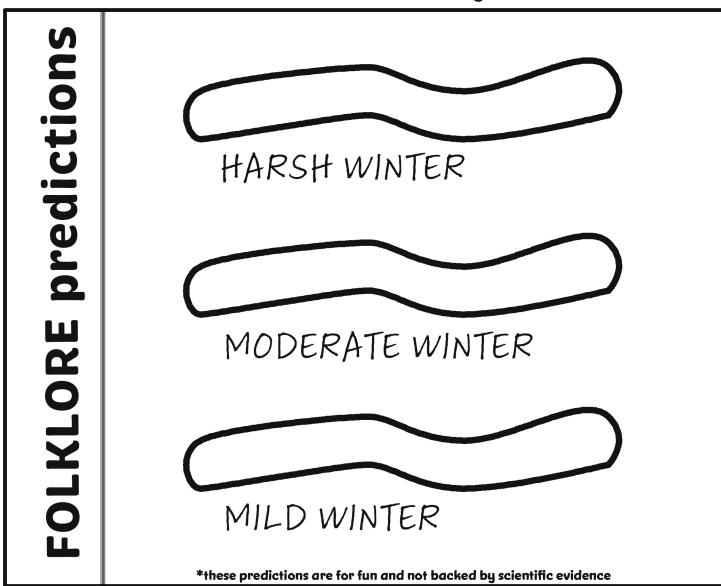
WOOLLY BEAR

caterpillar of the Isabella Tiger Moth



HOW DO THESE CATERPILLARS SURVIVE FREEZING?

They make their own anti-freeze by turning glycogen, (stored form of glucose) into glycerol & sorbitol (alcohols). These are cryoprotectants & lower the freezing point to 14° F. The caterpillars also move the water out of their cells into extracellular space so if the caterpillars do freeze, they won't burst their cell membranes, and will make it to the Spring thaw.

After they thaw in Spring, they will spin a cocoon and about a month later become the Isabella Tiger Moth.

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