

# Woolly Bears

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## Part of the tiger moth family

There is definitely a “nip” in the air. Winter is on its way. Maybe you have noticed our banded woolly bears diligently working their way across the road or through your flower bed. Why does the woolly bear cross the road? (more on that later)

The most frequently seen woolly bear in Skagit County is the black one with the orange/rust in the middle. This fuzzy caterpillar (*Pyrrharctia isabella*) is in the tiger moth sub-family, *Arctiinae*, and also called the Isabella tiger moth. *Arctiinae* is from the Greek word, meaning bear for hairiness. *Arctiinae* are noted for their bright colors. The fur is called setae. These setae do not cause urticaria (irritation) so the caterpillars can be handled.

Of the 1,000 North American species of the *Erebidae* family, 160 are known in our region. Another common woolly bear we see is the yellow one (*Spilosoma virginica*) ranging from nearly white to butter yellow to butterscotch.

They are so beloved they are also called woolly worms, weather worms, fuzzy wuzzies and, in some areas, “hedgehog” caterpillars, because they curl into a tight, bristly ball and play dead.

These caterpillars are generalist feeders, meaning they eat a variety of herbs and weeds, including plantain (a common weed in many yards) as well as the non-crop plants like dandelion, dock, aster, willow herb (a relative of fireweed), grasses and even stinging nettles. They move forward as they browse, so do little damage to individual plants (darn!). Even the fall webworm relative, which is abundant and greatly polyphageous, does not do damage to healthy hosts, in part because they feed in the fall when leaves are about to shed anyway.

The banded woolly bear overwinters as a caterpillar, so it seeks a hiding place in the fall in bark, under a rock or piece of wood. (That’s why they are crossing the road). They make an “antifreeze” glycerol, that keeps their cells from freezing even in temperatures as low as minus 90 degrees Fahrenheit. The setae helps them freeze more controllably. In the Arctic it can take up to fourteen years for the caterpillar to develop into a moth due to the short growing season.

The tiger moth adults are stout, fuzzy moths and occasionally brightly-colored rather than drab. The colorful species are mostly diurnal (that is, active during the day), while the majority (dull, cryptic species) are nocturnal. A distinctive feature of the moth is a tymbal organ on their

metathorax (the back segment of the thorax supporting the hindwings and rear legs) for hearing. Sounds are used in mating and for defense against predators.



Banded woolly bear. Photo by Virgene Link-New / WSU Skagit County Extension Master Gardeners.

The banded woolly bear has the distinction of being a weather predictor! This myth became popular after Dr. Howard Curran (curator of entomology from the American Museum of Natural History) did a small study in 1948. He did a tongue-in-cheek “study” due to folklore myths. Once the study was picked up by the national press, the idea (since debunked) became history.

The caterpillar has thirteen segments, black or rust. The rust segments predict a milder week of the thirteen weeks of winter, a black segment predicts a colder, snowier week of winter. The direction of the worm’s travel is also an indicator with a Northward path predicting mild and a Southern path indicating a desire to escape a harsher winter.

The winter prediction myth has also been de-bunked with a scientific article put out by the National Weather Service. They do provide a complete service! You can read it at: [weather.gov/arx/woollybear](http://weather.gov/arx/woollybear).

This charming idea has been embraced, so now several fall festivals are held around this “forecast” for winter, much like the famous ground hog Punxsutawney Phil’s prediction of winter’s length. There is a Woolly Worm Festival in Banner Elk, North Carolina, and

Beattyville, Kentucky; and a Woollybear Festival in Vermillion, Ohio; all held in the fall. The festivals include a variety of events such as: a string climbing race up a three-foot length of string, costume look-a-like contests, parades, a king/queen selection, youth pet show, car shows, 5K run/walk/crawl races, other entertainment plus vendors.

The Isabella tiger moth caterpillar may also be the only insect with its own web site:  
<http://woollyworm.com/>

This adoration is best acknowledged by protecting your own caterpillar species by refraining from using pesticides/herbicides in your garden and making sure you have rocks, thicket/brush or logs for hiding places.



Yellow woolley bear. Photo by Virgene Link-New / WSU Skagit County Master Gardeners.

#### **RESOURCES:**

- Insects of Skagit County by Lloyd Eighme
- Pacific Northwest Insects by Merrill A. Peterson
- Wikipedia
- <https://content.ces.ncsu.edu/banded-woollybear>
- [weather.gov/arx/woollybear](http://weather.gov/arx/woollybear)