

Colorado Insect of Interest

Banded Woollybear (Isabella Moth)

Scientific Name: *Pyrrharctia isabella* (J.E. Smith)

Order: Lepidoptera (Butterflies, Moths and Skippers)

Family/Subfamily): Noctuidae/Arctiinae (Woollybears and Tiger Moths)

Identification and Descriptive Features: The larva is the most familiar form of this insect. They are clothed in bristly hairs of uniform length with black hairs on the ends and reddish brown hairs in the middle of the body. When full-grown they are about 30 mm and roll into a coil when disturbed.

Adults are yellow-orange to brown moths with a wing span of about 45 mm. Several dark spots mark the forewings, two spots occur on the hind wing and the abdomen has 3 rows of spotting.

Distribution in Colorado: Widespread and may be found in most all areas of the state excepting the higher elevations.

Life History and Habits: Winter is spent as a full grown larva sheltered under leaves and other debris. It feeds for a brief period the following spring then produces a cocoon within which it pupates. The cocoon incorporates many of the body hairs of the caterpillar.

The adults emerge in late June and flights continue through July. Eggs are laid as masses and the larvae feed into early fall. The banded woollybear has a very wide host range and is



Figure 1. Banded woollybear



Figure 2. Adults of the banded woollybear, also known as the Isabella moth.

known to eat over 90 different kinds of plants including dandelion, asters, sweetclover, dock and grasses. Late in the season the caterpillars wander in search of winter shelter and are most often observed as they cross roads and pathways.

Related Species: The term "woollybear" is generally applied to any caterpillars in the subfamily Arctiinae that are densely covered with hairs. Within Colorado there are at least two additional species commonly considered woollybears - the yellow woollybear, *Spilosoma virginica* (Fabricius), and the saltmarsh caterpillar, *Estigmene acrea* (Drury).



Figure 3. Yellow woollybear.



Figure 4. Saltmarsh caterpillar, dark phase.

yellow woollybear may be called the "Virginia tiger moth". The term tiger moth is due to the strongly banded patterning of many of the moths, which typically include pink or orange patterned underwings. However, strong banding patterns are not known for adults of the common woollybears that occur in Colorado.

Moths of many members of the Arctiidae family are commonly known as "tiger moths". For example, adults of the banded woollybear are sometimes known as the "Isabella tiger moth" and the adults of the

Special Note: One enduring insect legend is that the severity of winter can be predicted by width of the bands on the body of a banded woollybear caterpillar. As the story goes, the broader the reddish brown center band, the milder will be the upcoming winter.

Bands of this species do vary; however, the band width of the caterpillar increases with the age. Rather than reflecting the average temperature of the future winter, it instead indicates how far along in its development it is before going into winter hibernation. A



Figure 5. Banded woollybear with a wide orange center band.

previous warm summer or extended Indian summer during fall will likely produce woollybears with the broadest bands.

Regardless, woollybears remain a likable insect of interest. This has been parlayed into the Ohio Woollybear Festival, annually held in early fall in the town of Vermilion, a suburb of Cleveland. Originally started in 1973 as Ohio's answer to the groundhog Punxsutawney Phil, the event has become very popular and in 2006 attracted approximately 100,000 spectators. "Woolly worm" festivals are also held in Banner Elk, North Carolina and Beattyville, Kentucky.