

Chippewa Valley Astronomy Update

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Photo: Meteorites are visually similar to Earth rocks, but may have a smooth skin caused by melting as they are heated by zipping through Earth's atmosphere.

Image credit: Lauren Likkel

Meteorites in Wisconsin: Essay by Kevin Litten

Is it difficult to find meteorites in Wisconsin? Scientists disagree, with some saying there should be more meteorites found nearer the equator than the poles. With exceptions, meteorites aren't easy to find anywhere yet they have been found all over the world.

Small meteorites are the size of sand grains. Collectors vacuum those up from roof tops, sort out the terrestrial dust, then display them in plastic sleeves. Other meteorites are stony in nature. They blend in well with our Wisconsin soil. Unless they land on your driveway they are very difficult to find. Most collectors seek meteorites large enough to hold in their hand that have a high iron content. These all have 3 characteristics; they are heavier than most rocks their size, they will attract a magnet, and have irregular surface markings known as regmaglypts.

The difficulty with collecting meteorites in Wisconsin is that other commonly found rocks will also attract a magnet. A short list would be Hematite, Magnetite, banded iron, Jaspillite, Geothite, taconite, slag, and clinker. Some are man-made; some occur naturally.

It is estimated that only 1 in 10 of rocks brought into the geology departments as meteorites at our state universities actually are meteorites. If a rock meets all three criteria listed above, they probably are genuine meteorites, but they must display all three. To absolutely prove an iron meteorite is real it can be sliced through. If it displays Widmanstätten patterns – it is a meteorite.

Sometimes people bring in meteorites to our astronomy club's public programs, and we ask, "Where did you find it?" And the answer we get is along the lines of, "Well it was in my uncle's things when he passed." Which doesn't do us much good. Meteorites frequently come down in bunches. Without the provenance of where it came down our chances of finding its buddies are greatly reduced.

Feeling lucky? A farmer in Dane County found a nearly 110 pound meteorite 15 years ago. It is now on display at the University of Wisconsin-Madison's Geology Museum. It is our state's 15th classified meteorite and is the first ever recorded in Dane County.

There is a greater chance of being bit by a shark in Wisconsin than being hit by a meteorite. Yet if you see one coming at you better duck anyway; it might be space junk. Probably hurts every bit as much.

--Kevin Litten is a member of the Chippewa Valley Astronomical Society.