Shooting Stars

by Hal Boland

English – Part I

Ms. Hafsa

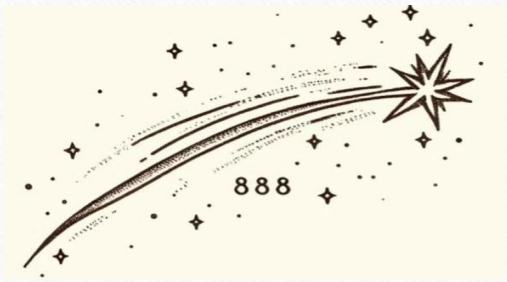
About the Writer

- Born in Sterling, Nebraska, USA
- Naturalist (studied animals and plants)
- Reporter for Denver Post and Brooklyn Times
- Wrote documentary film scripts, radio scripts, and non-fiction
- Honored by the National Audubon Society (Hal Borland Trail in Connecticut)
- His essay Shooting Stars shows fascination with nature & clear reporting style

(1900-1978)

Questions

- Define meteors?
- When do the biggest meteor showers occur?
- Describe the most unusual meteor shower ever reported.
- Give the reason of attributing so much value to meteorites
- Explain the effect of the largest meteorite that fell to earth?
- Why do you think scientists collect meteorites? What is it about meteors that stirs the imagination?
- Describe the difference between a scientific explanation and an explanation offered by a legend or myth?
- Can scientists learn something from legends or myths?



Text

Most clear, dark nights you can see a shooting star, as we call it, if you keep looking. Those shooting stars are meteors. They are points of light that suddenly appear in the sky, like distant stars, race across the darkness, usually towards the horizon, and disappear.

For a long time, nobody knew what a meteor was but finally those who studied stars and the sky decided that a meteor was a piece of a comet that exploded long ago. Those pieces are still wandering about the universe in huge, looping paths that follow the original comet's orbit. There are uncounted pieces of such comets out there in the depths of space. Periodically clusters of them come close to the earth's orbit, or path around the sun. Most meteors are small, probably only a few inches in diameter, but when they enter the earth's atmosphere the friction makes them white-hot. Then they look big as stars streaking across the darkness.

Text

There are half a dozen meteor showers each year. Each is named after the constellation from which it appears to come. The biggest of all, the Perseids, named for the constellation of Perseus, occurs on the 10th, 11th, and 12th of August. The next largest, the Leonidas, named for the constellation of Leo, comes on the nights of November 14, 15, and 16. Another, the Andromedids, which is not quite so big, comes from November 17 to 23. There are other meteor showers in December, January, April, May, and July, but none of them is as big as those in August and November.

While-reading

What are shooting stars?

Text

Most people watching meteors will be satisfied if they see ten or twenty in an hour of watching. On special occasions, however, the meteors seem to come in droves. The most remarkable meteor shower 1 ever heard of was seen by a distinguished astronomer, Professor Denison Olmstead, of New Haven, Connecticut, on the night of November 12, 1833. He was watching the Leonidas, which seem to come from directly overhead and race downward toward the horizon in all directions. He reported that meteors fell "like flakes of snow. " He estimated that he saw 240, 000 meteors in nine hours that night. He also revealed that they ranged in size from mere streaks of light to "globes of the moon's diameter. " If he had not been a notable astronomer whose accuracy was beyond question, such statements would seem ridiculous. But there is no reason to doubt what he reported. He had seen one of the most unusual meteor showers ever reported. What he watched should be called a meteor storm rather than a mere shower.

Text

I once watched the August Perseids with an astronomer on a hilltop in an open

16

Unit 2

SHOOTING STARS

country, and in two hours we counted almost a thousand meteors. That was the most I ever saw at one time. After that I tried watching for meteors in November and the most, I ever saw in November was about one hundred meteors in two hours of watching.

While-reading

Who is an astronomer?

Text

The amazing thing about these meteor showers is that they come year after year. Professor Olmstead saw all those Leonidas in November of 1833, but if you watch for meteors this year you almost certainly will see them on the same nights that he saw them. They will come next year, the year after that, and for countless years more. Your grandfather saw them, and your grandchildren will see them if they look for them.

Occasionally, a meteor reaches the earth. Then it is called a meteorite and it is valued as a sample of the vast mystery of the deep space in the sky. Scientists examine it, try to guess what it was to begin with, where it comes from and what it is like out there. Nobody ever learned very much from the meteorites except that they often contain a great deal of nickel and iron.

Text

Only a few large meteorites have struck the earth. The largest we know about, fell in Arizona (U. S. A) many centuries ago and made what is now called Meteor Crater, a hole about a mile across and 600 feet deep. Some Indian legends of the Southwest tell of a big fire that fell from the sky and ate a huge hole in the earth, so this big meteorite may have fallen since man first arrived in America, perhaps twenty-five thousand years ago.

Other big meteorites have fallen, in ancient times, in Texas (U. S. A), Argentina, northern Siberia, South-West Africa, and in Greenland. A meteorite weighing more than thirty-six tons was found in Greenland and now can be seen in the Hayden Planetarium in New York City. Millions of meteors have flashed across the night sky, but only a few large meteorites have ever reached the earth. Never in all the centuries of written history has there been a report of anyone being struck by a meteorite.

Activity

- Search about meteors and their origins
- Search names of famous meteors in history