

Helen Sawyer Hogg

Astronomer: Specializing in Variable Stars



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Helen Hogg was once interviewed on a television program in Washington, DC, and was asked by the TV personality what it was she did... exactly. When she told him that she studied the stars and the universe with her telescope, he asked her if she had brought her telescope with her. She confessed that she had not. It weighed 40 tons and had a protective revolving canopy that weighed another 80 tons!

“Her telescope,” like her world, was much larger than the interviewer could imagine, and far beyond anything that most people could even dream. “Her telescope” was the David Dunlap Observatory located in Richmond Hill, Ontario. When the Dunlap Observatory was opened in 1935, its 188-centimetre polished glass reflector mirror was the second largest in the world. Long before the age of human astronauts and spacecraft with telescopic cameras, it was one of the world’s most powerful means of exploring the vast expanse of outer space. Hogg did just that with “her telescope” for most of her long and productive life.

Born in Lowell, Massachusetts, in 1905, Helen Sawyer saw Halley’s Comet on its flight past Earth when she was only five years old. It changed her life forever! From that moment on, her life moved toward a career in astronomy, even though she would later confess that she did not really seek a career, but that circumstance and opportunity thrust one upon her. She received her PhD from Radcliffe College at Harvard University. She married fellow astronomer Frank Hogg, and they both accepted positions at the Dominion Astrophysical Observatory at Victoria, BC, in 1931. When the Dunlap Observatory was opened by the University of Toronto in 1935, Frank Hogg accepted a position there, while Helen pursued her astronomy research and lectured at the University of Toronto. When her husband died suddenly in 1951, she took over his weekly column on astronomy at the *Toronto Daily Star* and continued to write the column for more than 30 years. Through it, she popularized astronomy for countless school children (and their parents), explaining astronomy and the stars in simplified terms — to the extent that they could ever be “simplified.” Some of her best columns were put together in a book titled *The Stars Belong to Everyone*. And she truly believed they did!

With *Sputnik* and the advent of human space travel, a new era of astronomy was dawning and new student interest was being kindled. Throughout her life, Helen Hogg dedicated herself to teaching astronomy to these new generations of eager students. But she did not neglect her own research, and she spent most nights scanning the heavens, developing her knowledge base in her own special field of variable stars and globular clusters. At the time of her death, more than 400 variable stars had been identified, and Helen Hogg was credited with locating almost one-fourth of them.

She was greatly respected and honoured during her own lifetime. She was a fellow of the Royal Society of Canada, President of the Royal Astronomical Society of Canada, President of the Royal Canadian Institute, President of the American Association of Variable Star Observers, and Program Director for Astronomy at the National Science Foundation in Washington, DC.

In special recognition of her work, the National Museum of Science and Technology in Ottawa named its observatory after her. And in her honour an asteroid, or minor planet, between Jupiter and Mars was named “Sawyer Hogg” by the International Astronomical Union.

She never lost the thrill of exploring the sky, and she would be the first to admit that we really know very little about the vast, mysterious space that surrounds us. Although she believed it was possible that a spaceship from beyond our world might one day appear, she also believed that no scientific evidence supports the theory that one has already done so. She did not believe in astrology, and more than once crossed swords with some of its most enthusiastic adherents for not sharing their views on the universe. However, she did acknowledge that the universe affects our world in many mysterious ways beyond our own understanding.

Halley’s Comet, which started her on her own space odyssey, visits Earth on its eccentric elliptical orbit about once every 76 years. Helen Hogg lived long enough to see it return in 1986. Her life was devoted to the study of the stars. During her journey, she taught for 40 years, wrote a column for 30 years, and worked at her beloved David Dunlap Observatory until the day she died in 1993.

When she died, alas, she could not take her telescope with her. But she left behind a legacy of knowledge and experience for the new generations of astronomers who will use “her telescope” to continue and extend her work.