Maria Mitchell Essay, Research Paper

MARIA MITCHELL

The person that I chose for the Women=s History Month report is Maria Mitchell, who was a self- taught astronomer. She discovered Comet Mitchell and made amazing achievements throughout her life. Maria Mitchell was born on August 1, 1818 on the Massachusetts island of Nantucket to William and Lydia Mitchell. When Maria Mitchell was growing up in the Quaker community, few girls were allowed to study astronomy and higher mathematics. Even though the Mitchell’s weren’t rich Maria’s father, a devoted amateur( most astronomers of that time were amateurs) astronomer, introduced her to mathematics and the night sky. He also encouraged her toward teaching and passed on a sense of God as in the natural world. By the time Maria was sixteen, she was a teacher of mathematics at Cyrus Pierce’s school for young ladies where she used to be a student. Following that she opened a grammar school of her own. And only a year after that, at the age of eighteen she was offered a job as a librarian at Nantucket’s Atheneum during the day when it opened to the public in the fall of 1836. At the Atheneum she taught herself astronomy by reading books on mathematics and science. At night she regularly studied the sky through her father’s telesscope. For her college education even Harvard couldn’t have given her a better education than she received at home and at that time astronomy in America was very behind as of today. She kept studying at the Atheneum, discussed astronomy with scientists who visited Nantucket (including William C. Bond), and kept studying the sky through her father’s lent telescope.

In the mid-nineteenth century, new developments in astronomy were expanding the field at an fast and exciting rate. The Mitchell=s were aware that the King of Denmark awarded a gold metal to anyone who discovered a “telescopic” comet. No one in America had won that award yet.

On the night of October 1, 1847 Maria Mitchell discovered a comet just above the North Star. But by the time her letter of discovery reached William Bond (director of the Harvard Observatory) Father de Vico at the Vatican Observatory in Rome had already announced his discovery of the same comet on October 3. Professor Bond began a campaign to get Maria her rightful award.

On October 6, 1848, a year and five days later the King of Denmark decided to award the prize to Maria. At the age of thirty, she won an international honor. She became the first American, as well as the first woman to win the medal. In 1848, she was the first woman to be admitted into the American Academy of Arts and Sciences. Now that she was a celebrity many people came to see her, famous artists came from New York to paint her portrait, and people recognized her achievements.

Maria=s status as a respected astronomer also gave her new opportunities for employment.

In 1865 Mitchell was appointed professor of astronomy at the newly opened Vassar College (one of the first colleges for women) in Poughkeepsie, New York, and director of the observatory there. In 1873 she helped found the Association for the Advancement of Women.

Later she was also a pioneer in the daily photography of sunspots and was the first to discover that they were not clouds but whirling vortices of gas on the sun=s surface. She also studied solar eclipses, double stars, nebulas, and the satellites of Saturn and Jupiter.

Maria Mitchell died on June 28, 1889 in Lynn, Massachusetts. Even when she was sick before her death she kept her sense of humor.

Throughout her long life, Maria was continually uplifted spiritually by her study of the heavens. That she never failed to recognize the close connection between her work and her faith in God is evident in her famous words: “Every formula which expresses the law of nature is a hymn of praise to God.”

From the time she burst into the national consciousness as the discoverer of Comet Mitchell, she had been a model of what a woman, given the chance, could accomplish in science. Those who claimed that a woman=s brain would collapse under the strain of studying mathematics and science had been proved wrong by the very existence of Maria Mitchell. She resolved to give up the life of an independent scientist and devote her efforts “to the intellectual culture of woman.”

She struggled to promote the cause of women’s education. Her patience and self-control offers encouragement to young women considering astronomy as a career.

Maria Mitchell was given many awards and honors during her lifetime other than being the first woman admitted to the American Academy of Arts and Sciences. She was also the first woman admitted to the American Association for the Advancement of Science, and to the American Philosophical Society (founded by her distant relative Benjamin Franklin. She received honorary degrees, including one from Columbia College. A crater on the moon was named after her.

After her death, Maria was given still more honors. A tablet inscribed with her name was put in the New York University Hall of Fame and her name was carved on a frieze over the front of the Boston Public Library. In 1905 she was one of the first women elected to the Hall of Fame. In 1994, she was admitted into the National Women’s Hall of Fame in Seneca Falls, New York. An observatory was also erected in her honor on Nantucket Island. But even had she known of these later honors, her greatest satisfaction would still have been the effect she had on the lives of her students.