



APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2018.** Please include this application form with electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

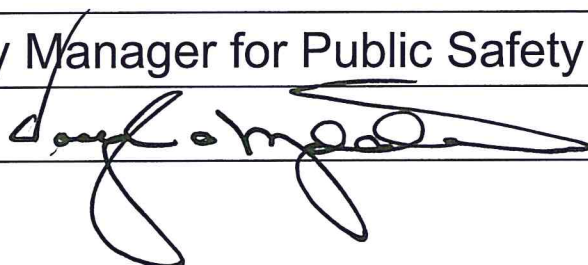
PROGRAM INFORMATION

County: County of Henrico
Program Title: Night Sky Astronomy
Program Category: Regional Collaboration

CONTACT INFORMATION

Name: Victoria Davis
Title: Management Specialist
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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Douglas Middleton
Title: Deputy County Manager for Public Safety
Signature: 

1. Program Overview

Henrico County Public Library (HCPL) first partnered with the Richmond Astronomical Society to present “Observe the Moon Night” in 2015 at Twin Hickory Library. The program aimed to provide a community event that would be educational and enjoyable for library patrons of all ages. It was an instant success, attracting 100 participants ranging in age from small children to senior citizens. Members of the Richmond Astronomical Society supplied high-quality telescopes, instructed viewers on using the equipment, and provided information about the moon and other celestial objects they could view.

Observe the Moon Night was soon replicated at the Tuckahoe Library, drawing another large crowd. In 2017, HCPL was invited to participate in the national NASA @ My Library project and continued a partnership with Richmond Astronomical Society to increase STEM programming in Henrico. The program goal was expanded beyond providing an event for families to increasing access to scientific learning opportunities for Henrico residents. “Night Sky Astronomy” programs at Libbie Mill and Varina Libraries drew large and highly diverse crowds at little cost to the library system.

2. Problem/Challenge/Situation Faced by Locality

Henrico County surrounds the city of Richmond on three sides. Some parts of the county require a significant commute to access the city’s major museums, like the Science Museum of Virginia, who regularly host the Richmond Astronomical Society for astronomy events. In areas of our county where residents experience poverty, work long hours, have small children or elderly individuals in their households, or lack transportation, it can be difficult to access an educational opportunity like Night Sky Astronomy. The partnership with Richmond Astronomical Society marked an expansion in the library’s dedication to STEM (Science, Technology, Engineering, and Math) programming in Henrico libraries. “Observe the Moon Night” at Twin Hickory library grew

from a single event to a county-wide effort to bring astronomy education to libraries, in order to make high-level scientific learning accessible to Henrico residents.

The occasion of International Observe the Moon Night in 2015 provided a perfect opportunity for the Library to partner with a community organization to provide an educational experience that promoted science and was appropriate for families and residents of all ages. This initial event also helped HCPL establish a relationship with the Richmond Astronomical Society and continue to collaborate on community events. The Richmond Astronomical Society is a member of the Night Sky Network, a national association sponsored by NASA that connects amateur astronomy groups nationwide with community educational opportunities. As a dedicated member of the Night Sky Network, the Richmond Astronomical Society's mission is aligned with the library's objective to widen access to astronomical learning.

3. How Program Fulfilled Awards Criteria

Libraries everywhere strive to make information accessible to their communities through freely available materials and educational programming. The Library staff strives to provide high-impact and low-cost programming, which can be difficult to achieve. By forming community partnerships, libraries can bring resources into their libraries at low cost, while providing partners an avenue to reach deeper into their communities. With the Night Sky Astronomy program, HCPL worked to bring a museum-quality program to residents of the county that is accessible to persons of all backgrounds and abilities. Librarians responded to community needs by combining the resources of the Richmond Astronomical Society and the NASA Night Sky Network with staff expertise to create a memorable, educational, and accessible community event.

A particularly innovative element of this program is that the events were successful in engaging patrons of all ages, bringing the entire community together in learning. Astronomy is a

subject that can spark wonder in everyone, from small children to the elderly, and in people from all backgrounds. It is a universal curiosity. These programs are not only financially responsible, accessible, and memorable, but also achieve a cornerstone of every library's mission: to inspire a life-long love of learning.

4. How Program Was Carried Out

Planning for the program started in March of 2015. The event was scheduled for September 22, 2015 to take advantage of the Supermoon due to occur that night, and to celebrate International Observe the Moon Night. A rain date of September 23, 2015 was also scheduled in case of cloudy weather. It was agreed that the program content would include a brief educational presentation, followed by an interactive segment where participants could view the moon through high quality telescopes provided by the Richmond Astronomical Society. Library Manager Hillary Burns and Public Services Administrator Barbara Weedman coordinated the event at the Twin Hickory Library. Henrico County Public Library (HCPL) publicized the event through the library website, printed program guide, posters, social media, and an email newsletter. Richmond Astronomical Society also publicized the event through their website and members. When the event had to be changed to the rain date due to cloudy weather, the change was publicized through the library website and social media.

On the night of the program, participants gathered in the Twin Hickory Library meeting room for an educational presentation. A speaker from Richmond Astronomical Society presented images using a laptop, and the library provided a screen and projector. After the 30-minute presentation, participants were invited to move outside to the library lawn to view the moon through telescopes. Glow sticks and necklaces were distributed to children to play with while they were waiting for a turn at the telescope. Richmond Astronomical Society members assisted

participants with the equipment, providing instruction and explaining what they were seeing through the telescope lens. Total attendance included 80 people for the astronomy presentation and 100 people for the outdoor viewing of the moon.

This program was repeated in March 2016 at the Tuckahoe Area Library. It followed the same format as the previous program, only with the addition of a few teen volunteers to help with set up, take down, and moving participants from the meeting room to the lawn. Volunteers were also stationed in the meeting room after the participants had made their way outside in order to point any late comers in the right direction. After everyone had a chance to see the moon through the telescope, the presenter positioned the telescope to a nearby star in the sky for a “bonus” view. Total attendance was 75 people of all ages.

In early 2017, Henrico County Public Library was awarded a grant through the NASA @ My Library project, with the goal of bringing NASA science into library programming, with particular emphasis on delivering programming to populations traditionally underrepresented in STEM fields: women, people of color, people from low-income households, and people in rural areas. NASA @ My Library participants were encouraged to work with their local Night Sky Network affiliate groups, and HCPL Librarians noticed the Richmond Astronomical Society on the list of local affiliates. The HCPL Youth Services Coordinator contacted the Richmond Astronomical Society, who agreed to bring Night Sky Astronomy to the Libbie Mill Library, located in middle to working-class Central Henrico, and to the Varina Library in the rural Varina District in Eastern Henrico.

These events, renamed “Night Sky Astronomy” and held in September 2017 at Libbie Mill, and October 2017 at Varina, were promoted heavily through the library’s Community Relations Department, with large posters advertising the events distributed county-wide, handbills and flyers sent to government offices and community partners, a press release resulting in local

media coverage, a banner on the library website, and Facebook event posts that attracted hundreds of interested persons. Librarians at both locations prepared activities for children and teens to ensure people of all ages could participate in the program; for the adults and those with longer attention spans, the Richmond Astronomical Society delivered a lecture prior to the viewing. Patrons then queued up to view the night sky through high-quality telescopes. The telescopes were adjustable in height to accommodate people of all ages, and those using wheelchairs and other assistive devices. The Libbie Mill event drew 180 participants, and the Varina event drew close to 100. The events attracted not only high numbers of participants, but highly diverse participants as well. Librarians made promotional materials available advertising upcoming STEM events at the library, so that interested individuals could continue their learning.

5. Financing and Staffing

Program costs

2015 Observe the Moon Night at Twin Hickory:

- \$80 for glow sticks, <\$1 per participant

2017 Night Sky Astronomy at Libbie Mill and Varina:

- \$50 craft supplies, <\$.20 per participant

The public relations campaign to promote these events used the in-house graphic designer, web developer, and Community Relations Coordinator to produce flyers, web content, and social media presence, at no extra cost to the library system.

Libraries in counties across the state could easily replicate this program by tapping into the NASA Night Sky Network to search for local affiliates. The Night Sky Network connects amateur astronomical groups to their communities through a commitment to public education. With a

small investment in craft materials, if the library has dedicated staff to run an activity for children during the larger program, or by purchasing glowsticks if the library has lower staff capacity, librarians can ensure that persons of all ages and abilities will be able to participate.

6. Program Results

The success of the program was demonstrated by high attendance. At the initial event at Twin Hickory Library in Northwest Henrico, 100 people ranging from families with small children to adults to teens. This program helped HCPL meet the strong demand for STEM programs and also provided the opportunity for the Library to partner with a community organization. This initial event also allowed HCPL to establish a relationship with the Richmond Astronomical Society and continue to collaborate on community events. The subsequent event at the Tuckahoe Library in Western Henrico drew another 75 participants.

When the program was expanded to Central and Eastern Henrico at the Libbie Mill and Varina Libraries, the objective of the program expanded as well. From the original aim of providing an opportunity to satisfy demand for STEM programs, the goal evolved into bringing STEM programs to areas of the county whose residents lack access to scientific educational opportunities or belong to groups traditionally underrepresented in STEM fields. These areas of the county are home to larger groups of middle- to low-income residents, immigrant communities, African-American residents, and residents of rural communities. The high attendance and diversity of attendees at the Libbie Mill and Varina events evidence the success of the program's expanded objectives. It was also the library's hope that these high-interest events would spark increased interest in other STEM programs provided at these libraries, and the libraries have continued to hold STEM programs with high attendance numbers.

Feedback for these events was very positive. Facebook comments were received thanking the library for providing the program. In feedback forms distributed for reporting to the NASA @ My Library Project, patrons said the following:

Under “Name one thing (in a word or phrase) that you learned today:”

- “That Saturn is 8 million miles away!!:)”
- “difference between double stars and two stars orbiting each other.”
- “phases of the moon.”
- “apex”
- “that Saturn’s rings are made of dust, ice, and rock.”
- “globular clusters.”
- “Millions of stars in a galaxy!”
- “I saw Saturn!”

The feedback forms indicated a wide range of ages, races and ethnicities attended the events. Most forms rated elements of the program at a three or four on a scale from one to four.

7. Brief Summary

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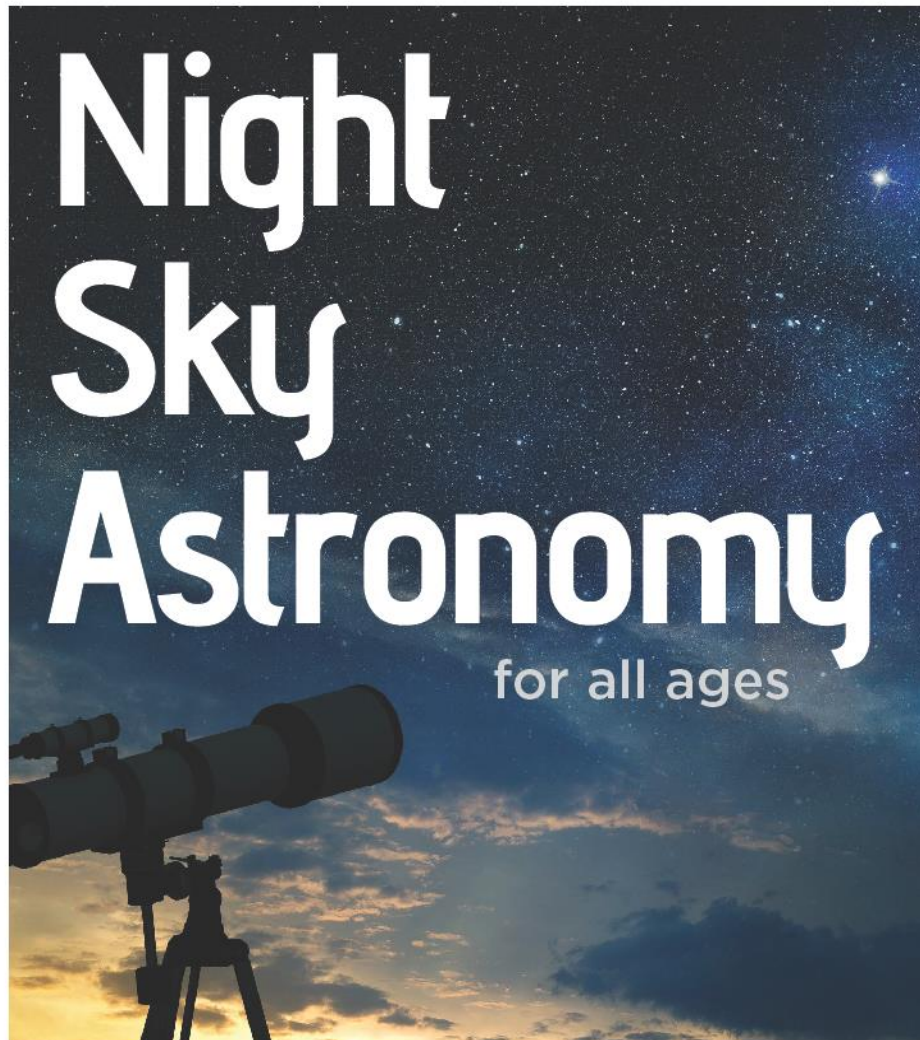
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A particularly innovative element of this program is that the events were successful in engaging patrons of all ages, bringing the entire community together in learning. Astronomy is a subject that can spark wonder in everyone, from small children to the elderly, and in people from all backgrounds. It is a universal curiosity. These programs are not only innovative, financially responsible, accessible, and memorable, but also achieve a cornerstone of every library’s mission: to inspire a life-long love of learning.

Night Sky Astronomy



Learn about the fun hobby of amateur astronomy and see craters and seas on the surface of the Moon with wonderful clarity and detail. Enjoy amazing views of the Moon and other celestial objects with high-quality telescopes operated by members of Richmond Astronomical Society.

A brief presentation on astronomy starts at 7 PM, followed by viewing through telescopes starting at about 7:45.



This program is offered as part of the NASA@ My Library initiative to engage public audiences nationwide in informal and lifelong learning with the excitement of NASA exploration and discovery.

Thu. Sep. 28
7:00 PM

cloud/rain date: October 2, 7:00 PM

Libbie Mill Library
2100 Libbie Lake East Street • (804) 501-1940



henricolibrary.org/calendar



A teen uses a telescope at Night Sky Astronomy at Libbie Mill Library, 2017



The Crowd at Observe The Moon Night, 2015