

Introduction

I have been doing public outreach events for many years. These events include helping with public star parties, volunteering at a local observatory, the Little Thompson Observatory (www.starkids.org) in Berthoud, CO and becoming a JPL Solar System Ambassador.

I also write a monthly “Eye in the Sky” article for 4 area newspapers. I started with the first paper, the Longmont Times Call, over 6 years ago.

Event 1

Date: January 23, 2006
Start Time: 7:00 PM
End Time: 9:30 PM
Attendance: 12 Girl Scouts and 8 Parents
Activities:

I was asked to help the next door neighbor’s Girl Scout Troop achieve their Astronomy Merit Badge.

I presented the different parts of the badge by describing the moon phases and how they relate to observers on earth and talked about solar and lunar eclipses. I did this with the aid of a basketball (the moon), a flashlight (the sun), a darkened room and had the girls in the middle of the room (the earth).

Next I presented stellar evolution, from a dust grain to their final deaths. I have a set of flash cards, a friend of mine gave me who was a Girl Scout Council member. The girls, in turn read the teaser lines on the cards, and I explained in more details, what the card meant.

Then I had my 8 inch telescope setup in the driveway. I showed the girls M35, M44, Mars, Saturn (which they liked a lot), the Double Cluster, M42, Polaris and its companion, Rigel, Betelgeuse and tied their colors to the cards and stellar evolution we had just done inside, and then the Moon, which just blew them away.

I have heard back that the girls really retained a lot of the information I gave them that evening, which is always good feedback.

Event 2

Date: January 24, 2006
Start Time: 6:30 PM
End Time: 9:30 PM
Attendance: 60-80 Students and Parents
Activities:

Our local club, the Longmont Astronomical Society (www.longmontastro.org) was asked to help with a star party at Shaw Heights Middle School, in Westminster, CO.

I took my 8 inch telescope and setup with about 15 other amateurs and gave the people a real treat. I noted that there were to be 2 nice Iridium flares, about 2 minutes apart, in the same part of the sky. When the flares intensified, the people were just wowed!!! They were incredible by my standards.

I used my 8 inch scope to show the people Saturn, M42, the Double Cluster, Venus, Mars, M44, M35, Polaris and its companion, M31, M81 and M82, Rigel, Betelgeuse and Capella. For these last 3 stars, I helped the people see their difference in colors and explained why they were different colors. Some kids knew why, for others, it was probably their first exposure to temperatures and how they relate to the stars.

Event 3

Date: February 22, 2006
Start Time: 7:00 PM
End Time: 9:00 PM
Attendance: 35 Students and 2 Adults
Activities:

I presented at the Little Thompson Observatory (LTO) to a high school group of students from Ft Lupton High School.

There were 2 other volunteers that night, so we broke the group up into thirds, and I did the warm room talk, three times that night. One group viewed through the telescope and one group went outside to do binocular observing.

The warm room talk involves a talk about the star wall that is there. I try to make sure people understand that the Sun and Planets follow a specific line in the sky, why the signs of the zodiac were chosen, star colors and how they relate to temperature and the distances involved between the stars and galaxies on the star wall.

The wall makes it very easy to move from one topic to another.

Then I field questions and try to answer what is asked. This group had spent time at the Denver Museum of Nature and Science, where they saw a full scale model of the Mars Rovers. This gave me the PERFECT opportunity to do some Solar System Ambassador presentation of facts about the Mars rovers, discoveries made and what is in the future for Mars exploration. This seemed to fascinate the kids so much, that I continued with exploration and I asked the question “Manned space exploration or robotic missions to the Planets?” The discussion that followed was very interesting, even to myself.

This is why I love talking at the LTO. I always learn something from the kids. They never cease to amaze me.

One student, a young lady, said she made up her mind to be an astronomer after visiting the observatory that night. I try to emphasize to the young ladies that science is alright for women to get into. It's not just for the boys. A question was asked about dark energy. I explained what I knew from reading articles in Sky and Telescope and Astronomy magazines. Then I said "This field is so new and exciting, that there are PhDs to be had by anyone in this room, if you wish to get one in this field." I always try to tie the importance of education to the goals and dreams of the kids. I say "If you like math and science, consider a career in engineering."

Event 4

Date: March 2, 2006
Start Time: 6:00 PM
End Time: 8:20 PM
Attendance: 10 Students and 8 Adults
Activities:

Our local astronomy club, the Longmont Astronomical Society, put on a public star party for the Boulder Day School. Due to a conflict with a science fair and a school play practice, attendance was minimal.

I brought my 20x80 binoculars, on a bino mount and showed the people the M42 area, including the great nebula, M35, M44 and Saturn, and the moon.

It was the first time I brought my binoculars instead of my telescope to a star party. There were 5 other telescopes, so I thought the view through the binoculars would be something different for the people to view through. The parallelogram bino mount worked great, for I could adjust the height of the binoculars to the observer's height, and the object was still in the field of view for them.

Event 5

Date: March 29, 2006
Start Time: 7:00 PM
End Time: 9:00 PM
Attendance: 20 adults and students
Activities: Warm room lecture and telescope viewing

I was the only volunteer for this group of high school students from two Ft Collins, CO high schools. The weather was real questionable, with clouds drifting in. We spend about an hour and a half at the telescope and about 30 minutes of warm room talk. The atmosphere magically cleared for the telescope time (the temperature dropped below the dew point and it cleared) so I showed everyone Mars, Saturn, M42, M35, M36, M65,

Betelgeus, Rigel Mizar, M79. Then the telescope controls locked up so we called it quits at the telescope.

The warm room talk was more of a question and answer session about questions the students had about material they were learning in class. I really like these *knowledgeable* groups, for I too learn much from them.

Certificate Request

Please have my name read Michael A. Hotka on my certificate. I am a member of the Longmont Astronomical Society. My address is 1425 Snowberry Lane, Broomfield, CO 80020 and my email address is mhotka@yahoo.com.

Please send the certificate and award pin to our club's ALCOR person, Dick Mallot, whom verified my 5 events and sent you this request.

Thank you.