ELC houses largest public observatory in Oregon

by Tina Guinn
Editor-in-Chief

The Environmental Learning Center parking lot was deserted when I walked along the wooded path to where The Haggart Observatory is located. I had been to the ELC before, but never fully realized what the fenced-in stairs were for. I had never paid enough attention.

As I waited for Ken Cameron, observatory director, to arrive for our interview, I noticed that the fence around the stairs was made up, in part, of crosswalk signal light poles. A padlock hung from the latch on the gate.

I heard footsteps approaching, and Cameron introduced himself and unlocked the gate. We walked up the stairs, 32 of them, and I noticed there were names carved in the face of each step. Cameron explained the purpose before I even had a chance to ask.

"The stairs leading up to the observation point were sold at $250 per step as a means of paying for the building. Each stair purchased has the name of the sponsor written on it," he said.

The Haggart Observatory, "Oregon's largest public observatory," took one year to build. It opened to the public for the first time March 7, 1989, so visitors could view the partial eclipse of the sun which occurred that day.

The ELC acquired the dome "serendipitously," Cameron said. In May of 1988, Darcy Haggart, the widow of Harold Haggart, donated the dome and the dome drive assembly to the ELC, after Haggart passed away. Haggart, a long-time Oregon City resident and professional telescope builder, had built a personal observatory, which is where the dome came from. According to Cameron, Haggart hand-cut and crimped each wedge-shaped piece when he constructed the dome in 1948

Cameron said the dome sat in the parking lot for months while ELC directors decided how to build the observatory around the dome. Observatory construction began in 1988 and was finished in 1989.

According to Cameron, there are two structures that were built together to house the telescope, the dome and the observation deck. The main structure, which contains the dome, the deck and the stairway, is held up by eight power poles which were donated by Portland General Electric. The other structure is a concrete column which solely supports the telescope.

Cameron said the two separate structures are a necessity, as they prevent the telescope from vibrating or swaying when there is a lot of activity on the observation deck.

Due to the volunteer status of the observatory, its construction was funded through donations and the use of recycled materials. The decking was salvaged from burned remains of the old Smuckers Jelly Cannery. The cannery used to be where the Clackamas Community Art Building now stands.

The paneling in the lobby area of the observatory came from discarded bleachers that the college no longer wanted. Cameron said even some of the optical equipment used to construct the telescope is recycled.

"We received the bulk of our material free or for nominal cost," Cameron said. "We even used recycled labor. That is, prisoners from the Clackamas County jail were hired for construction."

All of this Cameron highlighted for me as I followed him up the stairs onto the observation deck and then up the steep steps into the observation dome which houses the telescope.

Before people began to arrive, Cameron had to climb up the stairs into the dome and open the dome up so the telescope would adjust to the temperature of the outside air. "Most people do not know it, but the telescope must be the same temperature as the outside air in order to work properly," Cameron said.

Being slightly afraid of heights, I was nervous about climbing up the steps leading to the dome itself, but once inside, I was surprised at how large the telescope was.

The telescope was mounted on the concrete base in the center of the dome, but nearly reached to both sides of the wall. Cameron immediately began to explain the telescope. He said the telescope is a Newtonian Style, but is not what most people think of when they hear the word telescope.

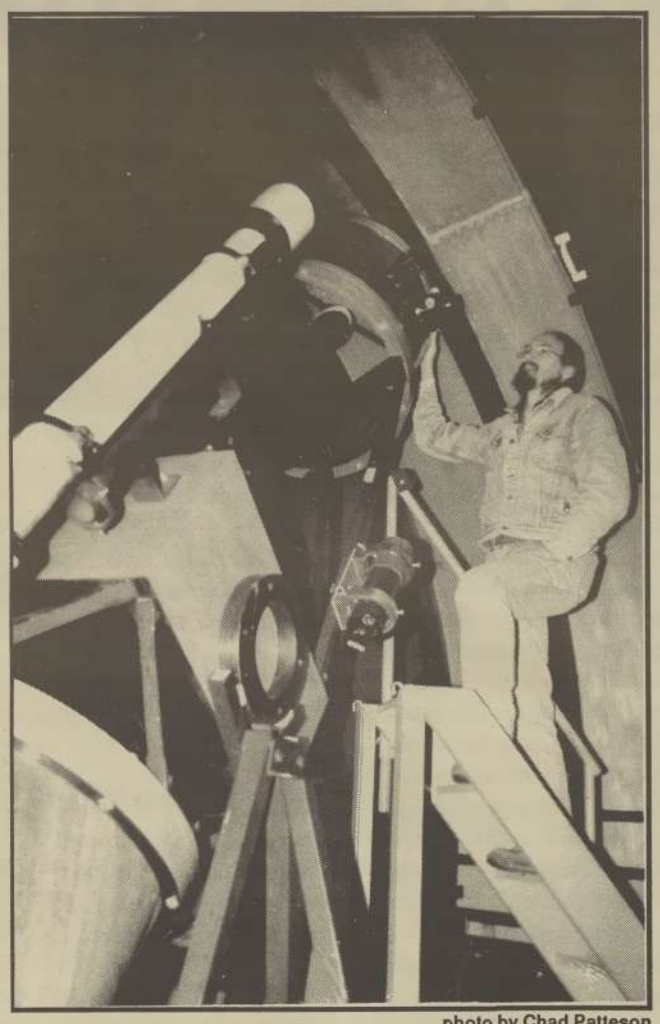

photo by Chad Patteson

Ken Cameron, observatory director, inspects the telescope on a rainy day when the observatory is closed. It is available for anyone to use: tickets are only $1.50.

Typically, a telescope is made up of a long tube with a lens on the front and an eyepiece on the back. However, large telescopes do not use the same type of lens to make the image.

There is a 24-inch diameter concave mirror at the end of the telescope. All of the light is bounced off that mirror and sent to a point inside the telescope. Essentially, Cameron said, this telescope works backwards from other telescopes.

"You have to climb up on top and look down into it," he said. While Cameron was explaining how the telescope operated, he was preparing it for that evening's tour. He even looked through the lens, focused on the moon and let me look. Wow! I had never seen the mountains on the moon before. I was impressed, and excited.

Cameron laughed. "That's how most people react who have never looked through a telescope before. People get a big kick out of it," he said.

Cameron even had a solution for those of us who are chickens when it comes to heights. There is a refractor on the other side of the telescope so those who are afraid of heights have an equal opportunity to enjoy the astronomical sights and the educational program Cameron and the other volunteers who make up The Haggart Observatory staff have to offer.

Cameron said that his purpose for the observatory is to entertain while informing. "People get an astronomy class when they come look through the scope," he said.

A typical program consists of the guide showing four or five objects and giving an explanation of each. However, there are occasions when the observatory is particularly busy and the guide may only have a chance to show three objects to allow everyone to have a turn.

So, who can taste the bit of space the observatory volunteers provide? Actually, anyone can. The observatory hours for the winter season are: 7:30 p.m. to 11 p.m. During the summer, the observatory opens at dark and is open until 11 p.m. During both seasons, the observatory is open Wednesday, Friday and Saturday nights. Also note that the observatory will not open if the skies are overcast, because that obstructs viewing. Admission is $1.50 per person. According to Cameron, average attendance for one of the nights is about 30 visitors. Group observations are welcome. However, they should be prearranged by calling 657-6958, ext. 2351.

I encourage everyone to check out The Haggart Observatory. The sights that cannot normally be seen by the naked eye can be brought to us, with the help of the observatory staff, in great detail and amazing clarity. It's a trip that's definitely worth the money. Those who do not share an interest in astronomy, or who do not have much astronomical knowledge (like me), will not be left in the dark. There's something for everyone.

"I like this place and teaching astronomy," he said. "This is the best side of astronomy, purely educational and entertainment."