In the desert, an observatory with out-of-this-world views

OREGON FROM **F1**

through its scopes, typically 12 to 15 on a given night. Celestial bodies are the stars of the show. And they're easy to spot, thanks to clear air and the darkness; Sunriver, the surrounding resort town, has a stringent lighting ordinance that protects the night sky from light pollution.

"We want people to look though the eyepieces," said observatory manager Robert Grossfeld, who has worked at the site since it opened in 1990. "Public access to such an array of telescopes is unusual. We have a diverse collection, and because different telescopes do different things well, people can view a wide range of objects in the sky."

Planetary viewing is often a highlight, since visitors can recognize details such as Jupiter's moons and Saturn's rings. But spring and fall are prime times for globular clusters (dense collections of ancient stars), especially on nights when bright moonlight might drown out the planets.

The observatory also offers daily solar viewing through two special telescopes that allow visitors to safely watch hydrogen storms and sun spots.

"Looking directly at the sun is a unique experience," Grossfeld said. "The sun changes every day and every hour. Telescopes give us the opportunity to show people what a star truly looks like, since our sun is the only star where you can see detail."

For the biannual star party, I had driven a half-hour from downtown Bend, arriving for my springtime visit at 9 p.m. Frogs croaked in the fading twilight, which painted the surrounding Central Oregon high desert pastel. I followed a trail of red lights (the color helped our eyes remain adjusted to the darkness) to the two-story observatory dome, through a starport with a roll-off roof and finally to a star deck outside; in these areas, 14 telescopes pointed at different astronomical marvels.

A couple dozen adults and children were already waiting for their chance to peek into the cosmos. A few fervent amateur astronomers had set up their own telescopes, and newbies shared their galaxy-sized enthusiasm.

"This is awesome!" a man said as he gestured at the scattered scopes. "Look at that, there are even more telescopes over there! This is going to be awesome!"

I stepped onto a ladder and squinted into the first eyepiece. A silver smudge hovered in the darkness.

I was looking at the Great Cluster in Hercules, a globular star cluster with about 300,000 stars. As my sight adjusted, shapes emerged: subtle whorls that resembled a pinwheel twirling through countless pinpricks of light. Paul Poncy, the observatory's program facility lead, oriented a 12.5-inch telescope toward the waxing crescent moon. Its craters were so textured, their nubby indentations appeared within arm's reach.

While we waited for the sky to darken, Poncy gave a talk on Mars in an outdoor amphitheater. In the summer, the observatory rotates several presentations that focus on planets, the solar system and constellations. The projection screen lacked the telescopes' first-person flair, but Poncy still impressed the audience with descriptions of Olympus Mons, the solar system's largest-known volcano (it's two-and-a-half times the height of Mount Everest) and Valles Marineris, a canyon that covers the distance from Oregon to New York.

When I returned to the star deck, the temperature had dipped into the 40s. I was grateful for my cold weather gear, and for the offseason. Up to 300 people might visit on a July or August night, but on this May evening, only 100 visitors craned their necks to the sky and tilted their ears to a dozen staffers and volunteers who were describing the sights. Fall and winter nights are similarly uncrowded.

"We call the dim stuff 'faint fuzzies,' " said a volunteer as he took a break from answering a little girl's astute questions about triple star systems. "The longer you look, the more you see depth, patterns, colors and shape."

He was right. Examining the planetary Cat's Eye Nebula nestled in the Draco constellation, I waited for its details to emerge. The complex dust-and-gas cloud rewarded my patience with a subtle green and blue glimmer. After a few moments I discerned the fuzzy white dwarf, a dying star, in its center.

I rubbernecked through telescope after telescope. In one, I peeked at Arcturus, a red giant star. In another, the Sombrero Galaxy, whose center probably contains a gigantic black hole. In a third, a flash of silver streaked across my field of vision: a shooting star.

Finally, I blinked into an eyepiece at glittering Messier 3.

"Its nearly half a million stars are among the oldest in the universe, about 8 to 11 billion years old," explained a volunteer. "Given that the universe is about 14 billion years old, they're some pretty old stars."

I blinked again, trying to absorb quantities that stretched into endless space and shifted my perspective outward from our little planet.

Don Barnes, a volunteer since the observatory's beginning, led visitors on a constellation tour without leaving the ground. He pointed a red laser into the heavens, where familiar figures cavorted: Ursa Major, Cassiopeia and Polaris. But with his guidance, new forms came alive. Draco the dragon blazed near Cygnus the swan in the north. Gemini, Leo, Corvus, Virgo and Lyra winked hello.

Grossfeld told me that these tours are an important part of the program, since they allow visitors to appreciate the night sky with their naked eyes.

"The number one thing that we try to give people is a sense of wonder and awe," he added. "You don't even need a telescope for that."

I was one of the last to leave at 11, lingering at a 20-inch research-grade telescope for one final look at Messier 3.

"It would take the fastest spacecraft we've ever built half a billion years to get there," Poncy said.

Over two hours, I had journeyed across the universe, but the observatory was closing and I needed to return to Earth.

travel@washpost.com

Williams is a writer based in Nevada. Her website is erinewilliams.com.

PHOTOS BY ERIN WILLIAMS FOR THE WASHINGTON POST

Red lights, top, which help eyes remain adjusted to darkness, greet visitors to the Oregon Observatory at Sunriver. The surrounding community's lighting ordinance protects the night sky from light pollution. A 20-inch, research-grade telescope that has been at the observatory since 1999 peers out a window in the dome. The nonprofit observatory's telescopes, such as the one above left, have mirrors up to 30 inches across to see more distant objects. But the moon remains one of the biggest hits.

If you go

WHERE TO STAY

McMenamins Old St. Francis School

700 NW Bond St., Bend

541-382-5174

mcmenamins.com/old-st-francis-school

Once a 1936 Catholic schoolhouse, this beautifully converted hotel provides pet-friendly accommodations in former classrooms, as well as a tiled soaking pool and movie theater. Enjoy an après-stargazing drink in one of its bars. Rooms from $135.

WHERE TO EAT

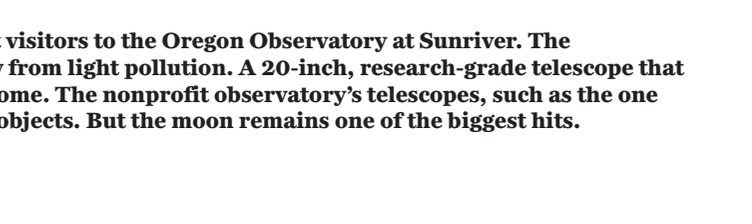
A Broken Angel

643 NW Colorado Ave., Bend

458-202-9334

abrokenangel.com

Food cart with local, organic plant-based menu with South American and French influences. Open 10 a.m. to 3 p.m. Wednesday through Sunday; check website for schedule updates. Located behind Palate a Coffee Bar. Also offers cooking classes. Entrees from $8.



TIM MEKO/THE WASHINGTON POST

WHAT TO DO

Oregon Observatory at Sunriver

57245 River Rd., Sunriver

541-593-4394

snco.org

Solar viewing time is daily from 11 a.m. to 2 p.m. Summer night sky viewing time is Tuesday through Sunday from 9 to 11 p.m. Beginning Oct. 27, fall and winter nighttime viewing is two nights per week — see website for dates and times. Admission $7 for adults, $5 for children for solar viewing and $10 for adults, $8 for children for nighttime viewing. No reservations accepted.

INFORMATION

nasa.gov/topics/solarsystem/index.html

E.W.