

MOON COUNTRY ON THE MONUMENT

In Celebration of Newberry National Volcanic Monument



NASA Personnel at Lava Lands - Photo Courtesy of USFS

Preparing for the Moon

Written by Amy Jensen

Today, more than 50 years after the Apollo 11 Moon landing, citizens around the world have seen footage of what the landscape of our Moon is like. Prior to the landing in summer of 1969 however, NASA did not know what to expect. They knew that the surface of the Moon was heavily pitted, but were unsure whether those pits were formed from volcanic activity, or from a celestial impact of some sort. As NASA searched for the right location to train their astronauts, their sights settled on Central Oregon.



Walter Cunningham at Lava Lands - August 27th, 1964 - Photo Courtesy of USFS



Photo Courtesy of USFS

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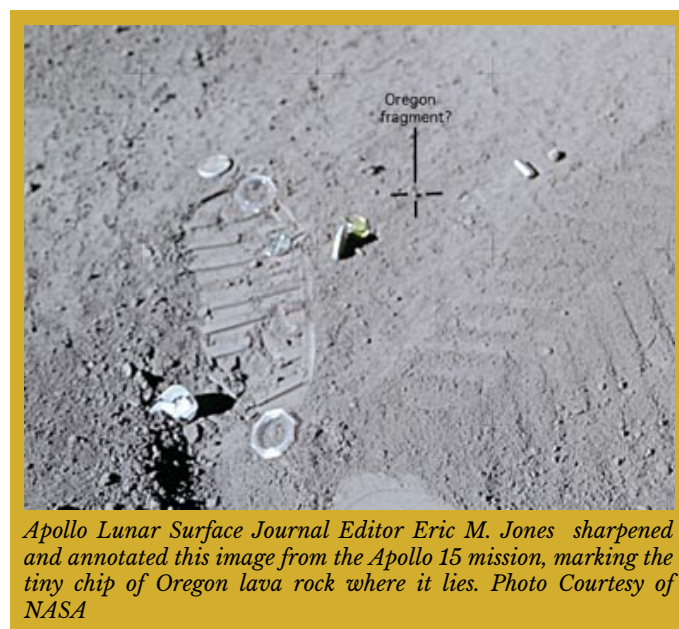
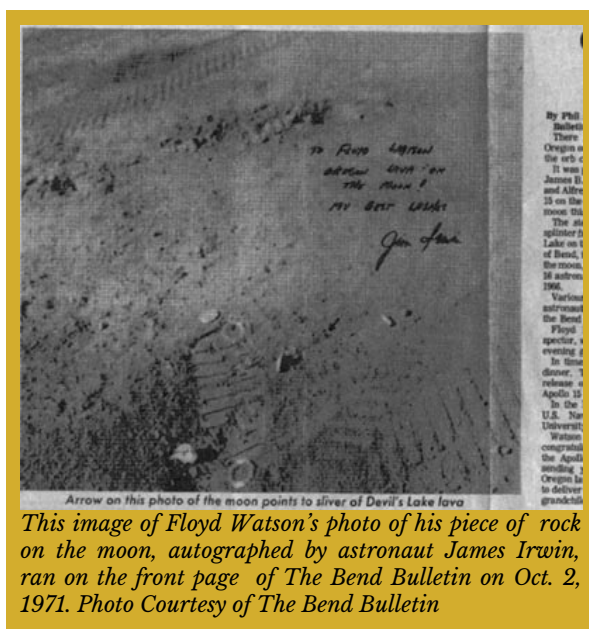
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“We didn't even know if [the Moon had] a solid surface or a deep powder surface, we didn't know if the rock fields were sharp or dull, we just had no idea”, recalls Jack Higginbotham, the Director of Oregon NASA Space Grant Consortium. In choosing the right location for training, NASA was looking for a diverse area that offered a multitude of volcanic landscapes. Newberry National Volcanic Monument is known to contain the widest variety of volcanic features of any National Park or Monument - making it an understandable choice for training locations. According to Science Training History of the Apollo Astronauts by William C. Phinney of NASA, “The major objective of [the training in Oregon] was to observe, analyze and discuss various volcanic features in the vicinity of Newberry Caldera...with an extreme range of differentiated volcanic rocks, obsidian flows, pumice cones, cinder cones and tuff rings...The origins, time sequences, compositions and flow mechanisms were discussed at each location.”

Central Oregon is known for its unique landscape. It is one of the very few places where you can travel only a couple of hours, and experience a wide array of volcanic geology. Not only was it important for the astronauts and NASA team to experience these diverse landscapes, it was vital for them to have a trial run with all of their equipment. From Walter Cunningham accidentally ripping his glove, to receiving feedback about the design of hand-tools and photo and sampling procedures, this rehearsal allowed for collaborative and experimental efforts in fine-tuning NASA's equipment and procedures.

Training in Oregon’s “Moon Country” began in 1964. For several years, teams of astronauts traveled to Central Oregon to explore and absorb the geological features. Neil Armstrong and Buzz Aldrin were among the team of astronauts who were part of the training that took place in Oregon. Accompanied by NASA personnel, astronauts visited a variety of locations - including Fort Rock State Natural Area, the Yapoah lava flow in McKenzie Pass, Lava Butte, the Newberry Caldera, and Hole in the Ground. These locations offered a spectrum of volcanic features that they anticipated being similar to what they might find on the Moon. Between classroom sessions and fieldwork studies, the astronauts gained the equivalent of a master’s degree in Geology. Lunar scientists from around the world came to Central Oregon to study alongside the trainees, and even held The Lunar Geological Field Conference in Bend during 1965.



In commemoration of the 50 year anniversary of the Moon landing last year, The High Desert Museum located just outside of Bend, hosted an honorary exhibit. During preparation for this exhibit, the museum’s Curator of Western History, Laura Ferguson, was able to get in contact with a local resident’s grandson who had a special story to tell. Apparently his grandfather, Floyd Watson, had developed a friendship with astronaut James Irwin during his time training in Central Oregon. At some point, Watson sent Irwin a piece of Oregon lava as a keepsake for his time in Oregon. During Irwin’s trip to the Moon on Apollo 15, he placed that rock on the Moon’s surface to live there for the rest of time. Paul Reynolds, Mayor of the City of Bend from 1964-1966 recollects, “You can’t help but feel a little bit of pride. It was a privilege and an honor to have them here.”