From Coyotes to Moonbeams

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The last Apollo mission to the Moon, Apollo 17, left Earth on a huge Saturn V rocket on December 7, 1972 to land in the deep Valley of Taurus-Littrow, carved through the magnificent mountain rim of the Serenitatis impact basin. On December 11, 1972, as the Lunar Module Pilot, New Mexican, and geologist Harrison Schmitt became the 12th and last Apollo astronaut to step on the Moon. For 75 hours, he lived and worked in the valley, performing extensive geological studies of volcanic rocks, boulders that had rolled down from the surrounding mountains, and the meteor impact generated soils (regolith) that cover the valley floor and walls. Over 22 hours of successful exploration of Taurus-Littrow capped Apollo's six-mission investigation of the materials and history of the Moon. His synthesis of the observations, samples and photographs from the Apollo missions and subsequent orbital spacecraft continues to this day. At the initial conclusion of these studies, however, science had gained a first order understanding of the evolution of the Moon as a planet and of the earliest history of the Earth during which life began and evolved. Humankind also has gained knowledge of new resources in the soils of the Moon that may provide energy for use on the Earth and help initiate the exploration and settlement of Mars.