

Welcome to Earth Matters – field notes on the geology of New Mexico’s Enchanting Landscapes.
Celebrating Earth Science Week, I’m Paul Bauer.

Two astronauts stride across the high plain, enjoying the exotic landscape and distant volcanic plateau through the thin, clear atmosphere. Arriving at a survey station, they place a metal canister on the sandy surface and extract a remarkably sensitive piece of scientific equipment – a gravity meter designed for planetary exploration. Satisfied with their reading of the gravitational field, they radio the results to Mars Base.

Science fiction? No! Mars exploration? Not yet! This was the scene near Taos, in 1999, when 31 astronaut candidates participated in geological training sponsored by NASA and the New Mexico Bureau of Geology.

At their core, the six Apollo moon landings were elaborate geologic field trips, and yet, with the exception of New Mexico geologist Harrison Schmitt -- the last man to have stepped onto the moon -- all eleven previous lunar explorers were military pilots.

And so, in 1969, when NASA transitioned to geologic exploration and sampling, a Moon-like training ground was needed. The volcanic landscapes along the Rio Grande gorge were ideal, and in the early 1970s, space-suited men could be spotted driving lunar dune buggies across the Taos Plateau.

The Apollo geologic missions were spectacularly successful, and NASA has continued to send space cadets to Taos.

The next class of eight cadets will touch down in Taos in the summer of 2014. Conceivably, some of those explorers will take humanity back to the most remote geologic field area in human history, the moon or, even to Mars.

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