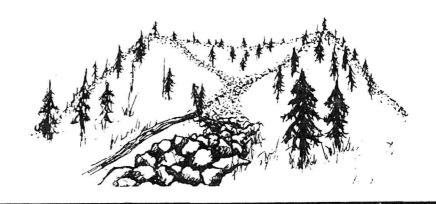
ElMalpais

National Monument National Conservation Area U.S. Department of the Interior

EL CALDERON



One of the oldest eruptive centers in the monument, the El Calderon area offers above ground explorations of sinkholes, aspen groves, El Calderon crater and lava trenches. Underground explorations take you into Junction Cave, a 3000 foot long lava tube. To venture underground, and for your safety, take several light sources, boots, hat, gloves and protective clothing.

Heading west on SR53, turn south soon after mile marker 66, approximately 20 miles from I-40. The first $\frac{1}{4}$ mile is suitable for all vehicles. Other area roads require high clearance. Please stay on designated roads. Vehicle travel in the El Calderon area is discouraged when roads are wet.

EL CALDERON CRATER & FLOW

flow. This is evident especially by the long distances travelled by the flow. The gentle, rolling, grass covered basalt hills under and around I-40, near Grants, originate from the El Calderon vent 20 miles away. Much of this flow is covered by later flows. Cerro Bandera and Cerro Rendija are similar flows considered to be concurrent with El Calderon dating back somewhere between 150 to 800 thousand years old.

El Calderon was a rapid, fluid This crater and its flow are among the oldest of the flows in the El Malpais National Monument. The relative age of this flow can be seen by its dull, weathered look and by the amount of extensively vegetated soil that covers much of the flow.

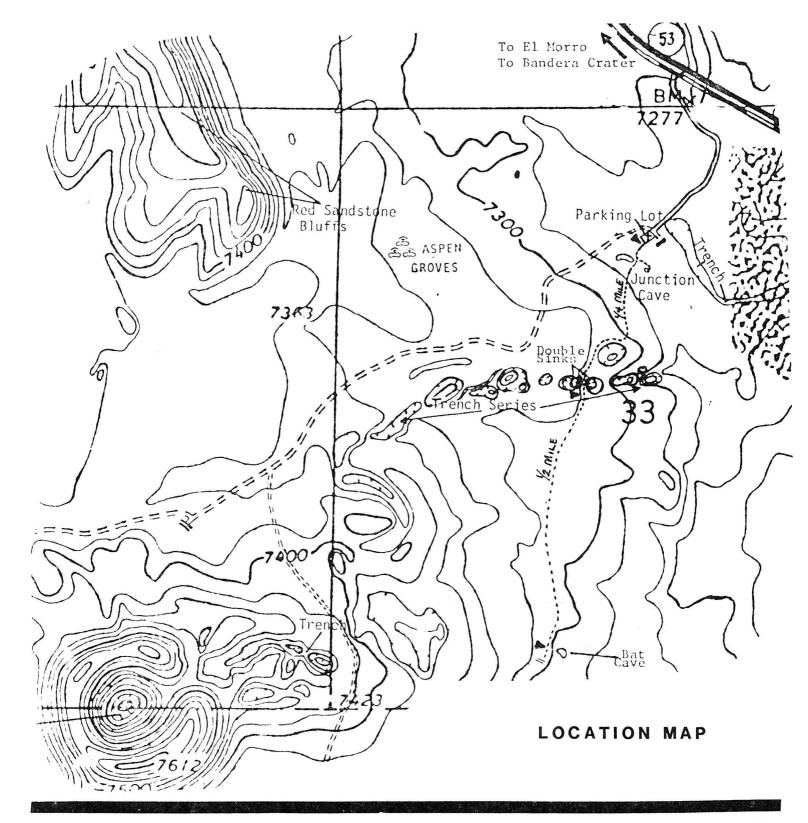
JUNCTION CAVE



Junction Cave is actually part of a lava tube system that borders the El Calderon flow. It originates about 3 miles northwest from the Twin Craters cinder cones. This tube extends approximately 3000 feet over ceiling blocks that fell as the tube cooled, shortly after the eruption ceased.

FOR MORE INFORMATION

Bureau of Land Management/ National Park Service El Malpais Information Center 620 E. Santa Fe Street, Grants, New Mexico 87020 Telephone (505) 285-5406



LAVA TUBES

Lava tubes are the pathways that lava travels downslope. The lava exposed to the air, cools rapidly, creating a crust creating twisted rubble filled which insulates the molten lava inside, which continues to flow. When the magma chamber empties and the flow diminishes, the remaining lava flows out of the tube leaving a flat floored tube with an arched ceiling.

Because most lava tubes lack the necessary ceiling support, portions fall or collapse trenches where tubes once were.

MEXICAN FREETAIL BAT

A Mexican freetail bat colony migrates between the caves in this area and somewhere in Mexico. Flights can be observed at dusk during the summer from the knoll above the bat cave entrance.

Because of very dangerous health risks to humans and the disruption to the bats, do not go into any designated "bat cave". If you are in a cave and come across bats, do not shine lights at or otherwise disturb them. These caves are their homes.