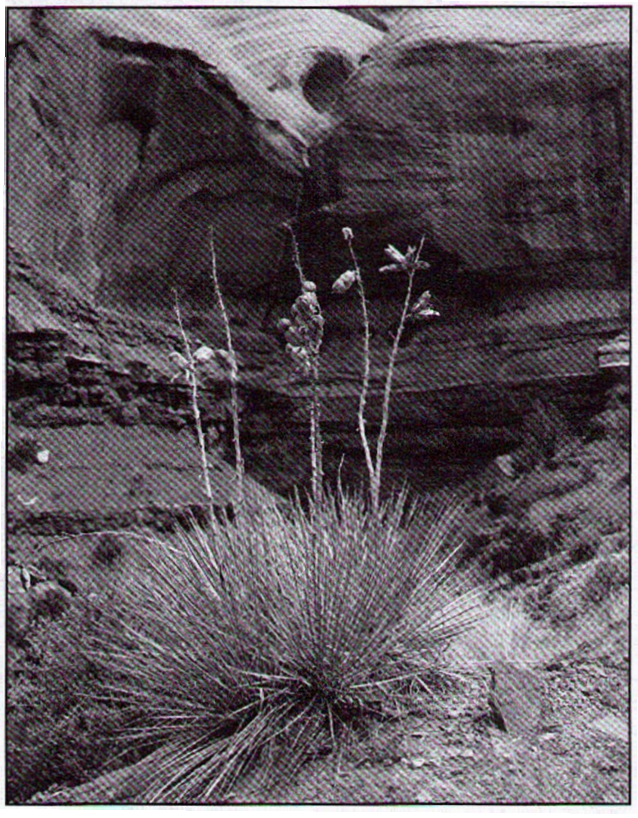
Dikes

Steven Semken
Tempe, Arizona

A dike is a remnant of igneous rock that formed about 25-30 million years ago when magma filtered into a crack that was at the time buried deep in the Earth's crust. The magma solidified into a hard, dark, gray igneous rock called "minette." Later, the buried dike was exposed at the surface by erosion. The dike stands up because the igneous rock is more resistant to erosion that the surrounding rock. In the dikes shown on the back cover, the surrounding rocks look to be red sandstone.

The dikes on the back cover are similar to the "wings" that extend from Ship Rock and the many other Navajo volcanic centers in the Four Corners region. Nearly every large volcanic monolith, such as Ship Rock, Agathla Peak, Bennett Peak, Ford Butte, and Barber Peak, has dikes connected to it because these fractures were the conduits by which magma was transported to the volcano. Similar dikes exist in the Gallup region as well.

Note The orange and green colors on the rocks are lichen.



LEADING THE WAY-- The Wisdom of the Navajo People
volume 15, no 7, July 2017