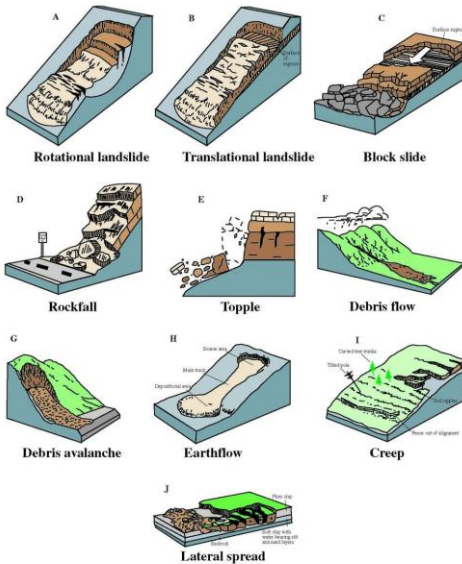




## Arizona Rocks 80

Text and photos by Ray Grant

As we continue with geologic hazards, this month's column is about landslides. There are lots of steep mountains in Arizona so landslides are common. The term is being used here for many different types of land movement; see the following diagram from



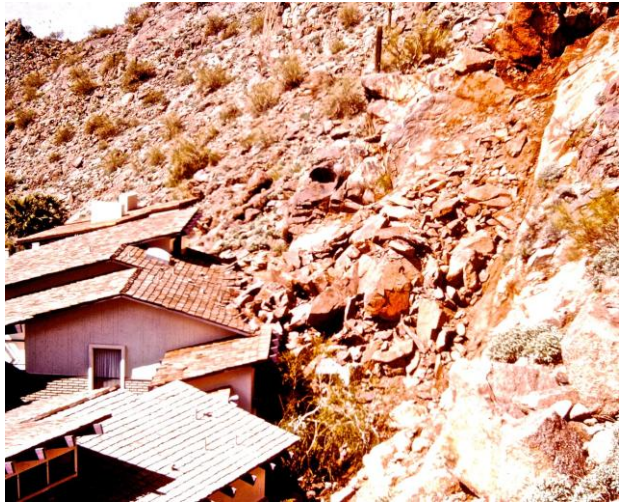
the Arizona Geological Survey with all the different types. The Geological Survey also has extensive information with maps about landslides in Arizona.

One that they have studied is the Marcus landslide in the McDowell Mountains. This is one of the largest landslides in Arizona and happened about 500,000 years ago. It is estimated that 25.8 billion tons of rock moved downhill about a mile. The lesson is that this could happen again and with the increased populations living around the mountains in the Phoenix area, there could be a major disaster.

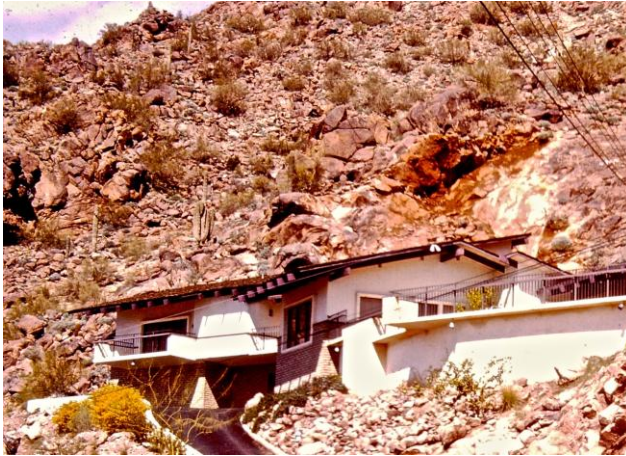
In 1978, after some heavy rain there was a small landslide on Camelback Mountain that caused damage to a house. You can see by just looking at the material on the mountainside that it is potentially unstable.



The Marcus landslide in the McDowell Mountains, Arizona Geological Survey photo



Landslide (rock fall type) on Camelback Mountain in 1978, Ray Grant photo



Unstable looking rock on Camelback Mountain above house hit by landslide, Ray Grant photo