Rock of the Month - Basalt

Basalt is an igneous, extrusive rock. It is generally fine-grained, but can be vesicular in texture. It contains feldspar (plagioclase) which would be exhibited as the lighter minerals in the rock, and olivine and/or pyroxene, the ultramafic darker matrix of the rock. Basalt does not contain any quartz. The rock may form columns, called columnar jointing, as it forms. These columns may be tens to hundreds of feet in height and several feet in diameter. Some of the most famous columns of basalt in the United States are found at Devil's Tower in Wyoming, and were part of the storyboard for the movie "Close Encounters of the Third Kind."

Basalt is found wherever volcanic activity has or is occurring. Basalt flows tend to extend farther from the volcano than rhyolite flows because basalt is much more fluid than rhyolite. Some of the dark beaches of Hawaii consist almost entirely of basalt sand, formed by the weathering of basalt that has been in contact with the ocean waves over extremely long periods of time. Flows of basalt that reach the edge of the islands in Hawaii pour over the side into the ocean. As these flows enter the ocean, they overlap and form pillows. The hot lava cools quickly in the ocean waters, forming pillow lavas. Significant pieces of basalt that are thrown into the air during an eruption are shaped aerodynamically as they spin and form basalt (volcanic) bombs.

Older basalt is quarried, crushed and sold as traprock.

The term "basalt" is derived from the Latin *basaltes*, Greek *basanites*, Egyptian *basanas*, all meaning "touchstone."

Crystalline Basalt

Vesicular Basalt

Columnar Basalt