



Arizona Rocks 22

Text and photos by Ray Grant

The last sedimentary rock we will cover is coal. Coal is an organic rock formed from the accumulation of plant material. It is believed that most coal forms in large fresh water swamps. If the plants are covered with water they will not decay very fast and layers of peat are formed. If the peat is buried so there is a rise in temperature and pressure coal will form. Depending on the temperature and pressure the result will be different grades of coal (lignite, bituminous, or anthracite).

In Arizona, coal is found in Cretaceous age (145 to 66 million years ago) rocks. There are several occurrences of Cretaceous rocks across Arizona where coal is present, but the only commercial coal is found in Black Mesa in Navajo County. Arizona coal is bituminous. For more information about Arizona coal, see Arizona Bureau of Mines Bulletin 182 (1970) which is available at the AZGS <http://repository.azgs.az.gov/collection/67?page=1>

Next month there will be a summary of sedimentary rocks.



Peabody Coal Mine, Black Mesa, Arizona



Coal layer at Peabody Coal Mine, Black Mesa



Coal Mine Canyon, on Route 264 east of Tuba City, Coconino County, and the coal bed has burned caused by lightning



Burning coal bed at Peabody Coal Mine, Black Mesa, fire caused by lightning

