Cutting through Rock with Water ... Weather ... and Time

ral music can be percussive, gentle, or raucous. Over the rim at Gunnison Point, where you are mindful of loose rock that could send you sliding into the blackness, a muffled sound reaches up to you. You listen, hard. Is that the wind or the river 1,800 feet (548 m) below you? Close your eyes, and the sound gently envelops you. Open them, and a violet-green swallow passes The roaring of the river but adds no sound, or did it? A white-throated swift soars within arm's reach, riding a thermal, reverberated and

> You sleep that night beneath the Milky Way, frothy with stars, as you've never seen it before. In the morning, despite being warned of the steep grade, poison ivy, and heat, you hike to the river. In time the roar builds to a crescendo, until it cancels out all other sounds. You look warily at the 10-foot (3 m) boulders casually scattered about. Any minute one could come crashing down. Imagine the power and the sharp crack as rock meets rock.

its wings adding the slightest bit of flutter to

the river's distant rush. A wind gust hits your

cheek. From below comes the sound of a pere-

grine falcon perched beneath a sheltering rock.

Song of the Gunnison Black Canyon's natu-

A Powerful Partnership John W. Gunnison, an explorer and engineer seeking a Pacific railroad passage in the 1850s, judged Black Canyon impenetrable and difficult to cross. He could not have known that the river had hewn the canyon walls from a dome of extremely resistant crystalline rock nearly two billion years old. A geological event now known as the Gunnison Uplift had raised the canyon's rock from deep in Earth's basement.

Time is the Gunnison River's unseen but equal partner. Two million years ago, its course determined by the location of high mountain ranges (below), the river began cutting through the uplift's core with rocks, gravel, and sediment. Empowered by floodwaters, it gained speed through a steep descent from the surrounding mountains. It wielded huge boulders that scoured trees and chiseled the canyon bottom which had not yet been reached.

Sawatch Range **Elk Mountains** San Juan West Elk Mountains Mountains

> Below: The Painted Wall from Cedar Point, South Rim. Veins of pink, igneous pegmatite run horizontally through canyon walls of blue-black, metamorphic gneiss.

Vertical Views Black Canyon has some of the darkest skies over the United States. The skies crown a sliver of habitat for nocturnal animals and plants that need the darkness to survive.

Pinyon-juniper and Gambel oak woodlands grow near the canyon rims and on the gentler slopes, while lone trees occupy crevices and narrow gorges. Some pinyon and juniper trees are centuries old. Dark spires of Douglas-fir rise from inner canyon ridges. In fall aspen trees glow yellow. Mosses and ferns attach to cool, shaded, moist walls. Box elders cling defiantly to river banks, while most plants struggle at the bottom. You'll mainly find rocks there, as explorer Abraham Lincoln Fellows did in 1901: "Gigantic boulders had fallen in from the cliffs, the water flowing 100 feet [30 m] or more beneath these boulders ... smooth and polished to such an extent that it was only with the greatest difficulty they could be surmounted."

Expanses of silver-blue sagebrush, grasses, and forbs at the North Rim support the Gunnison sage-grouse, a threatened species. Bobcats, mountain lions, and black bears are among the mammals that roam both rims. Bighorn sheep delicately balance on the inner canyon's ledges. American dippers share the water with beavers and river otters. Nocturnal ringtails may nestle among boulders at the canyon bottom.

















echoed like demons

Abraham Lincoln Fellows, 1901

howling over their prey.





