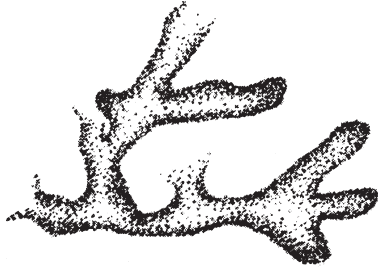




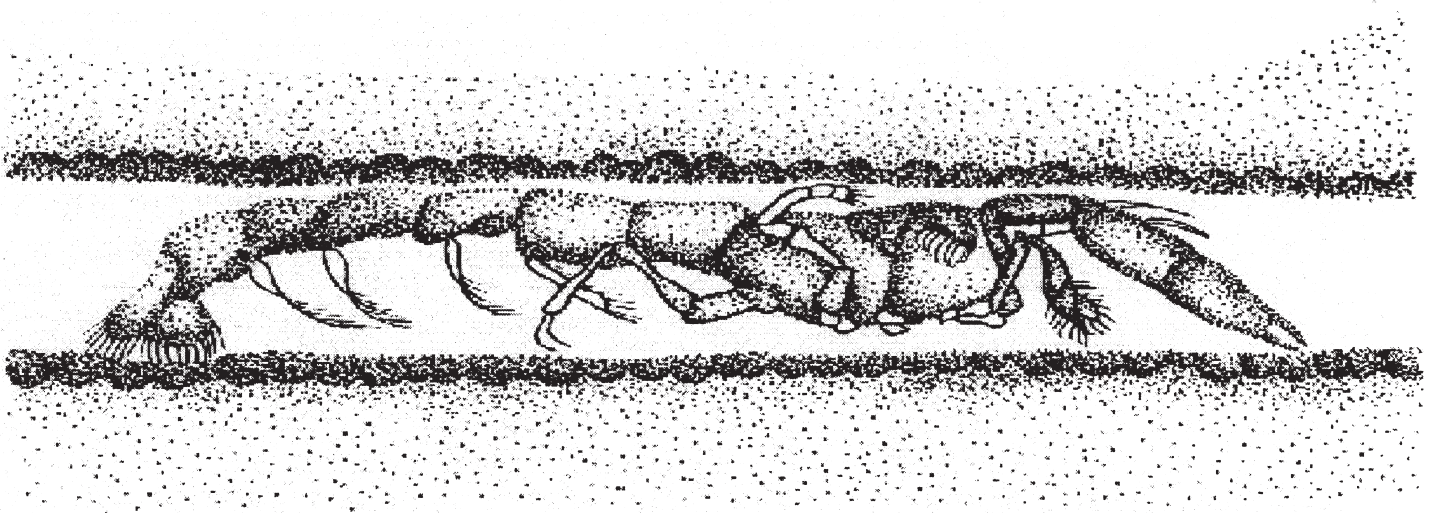
Fossils from the Cretaceous Sea

Chaco Canyon is well known for the impressive Chacoan public and ceremonial buildings, engineered and constructed ten centuries ago by the ancestors of Southwestern indigenous peoples.

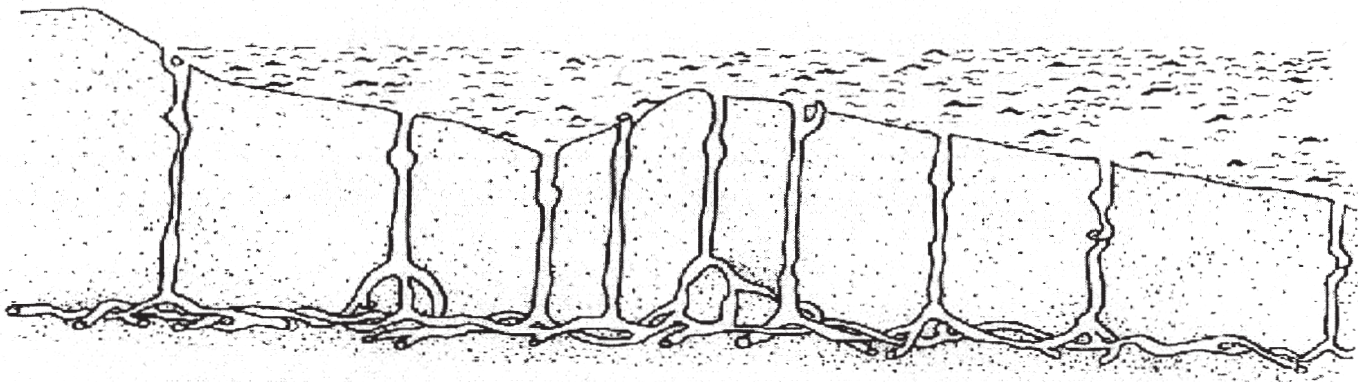
As you explore the park, you'll also encounter remnants of a far older world. Mesatop cliffs are remnants of a seabed made up of petrified Cliff House sandstone that is 60 to 80 million years old. If you look closely at the sandstone rock around you, you'll discover fossilized remains of creatures that once flourished here, when this was a coastal area. Look even closer, and you may be able to identify the remnants of a clam or crustacean, or perhaps find a shark's tooth.



Embedded in the bedrock throughout the canyon, you'll also see knobby, tubular, reddish-brown casts or molds that resemble rusty iron rebar or fossilized corn cobs. Paleontologists call these knobby tubes *Ophiomorpha* (dwelling place) *nodosa* (nodular), and believe they are the fossilized burrows of a shrimp-like crustacean known as *Callianasa major*.



When this region was near the shoreline, these small crustaceans burrowed into the offshore seabed, creating a network of tunnels. Wave action set the sand in the shallow sea waters into motion. To survive, and keep their tunnels from collapsing, the crustaceans cemented sand particles to the walls of the tunnels, making the tunnels knobby. In deeper waters, where sands were more stable, tunnels needed less cementing, and are smooth.



When the ocean receded, heavy particles of iron, mercury, and other minerals suspended in the water moved downward and settled into openings that remained in the seabed. The iron particles filled the crustaceans' abandoned tunnels and hardened as the seabed continued to dry. These particles provided the structure, color, and texture of the crustaceans' ancient dwellings, and their fossil forms.

As you continue your journey through Chaco, think about all the builders that have dwelled here—and enjoy and respect all of their creations. This truly is an extraordinary place. Please help us preserve and protect it.