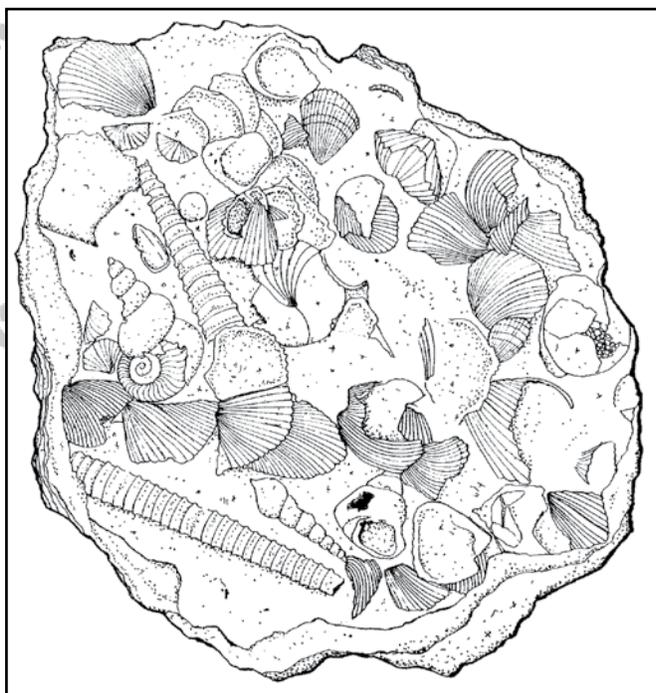


# Paleopuzzles

Would you like to follow in the footsteps of a dinosaur? Well, there are places on BLM lands where you can do just that. You won't find any living dinosaurs, of course. They died out long before any humans came along. But you might find fossils of dinosaur bones or tracks. If you do, please leave them in place. But tell someone, because scientists would really like to know about your discovery.

That's because fossils are not so easy to find. Fossil formation is a chancy process (see box at right). Even so, a large number of fossils have been found on BLM lands. In fact, many of the fossils in American museums came from public lands. Fossils belong to all of us, and they can tell us a great deal about ancient climates and landscapes. Did you know, for example, that a shallow ocean once covered large parts of BLM lands in the West? How do we know? From fossils of sea creatures that have been found there. Fossils are the best clues we have as to how life developed on Earth. And that's why it's so important to protect these ancient treasures.



## Making a Good —Impression—

It takes just the right conditions over a long period of time for fossils to form. In the first place, the remains of dead plants and animals have to be buried fairly quickly—perhaps under mud or volcanic ash. Once buried, the remains have to stay undisturbed for a long time. It might take centuries for remains to become petrified. This occurs when living material is replaced by dissolved minerals, which then harden. Fossils can also form by the mold-and-cast process, which occurs when sediments around an object harden. When the object decays, an empty space, or mold, is left. If the mold fills with other sediments, which then harden, a cast is formed.