

Kremmling Cretaceous Ammonite Locality



A Research Natural Area

The Bureau of Land Management designated this 160 acre site as a Research Natural Area in 1983. This site was designated to provide for research, education, protection, and preservation of scientifically important invertebrate and vertebrate fossils. The site provides a unique opportunity for professional researchers to study the giant ammonites and other associated marine species as well as oceanic, climatic, and paleoecological changes.

Within this area you may discover a variety of marine fossils which are located in the Pierre Shale of the late Cretaceous age. Including the ammonites, there are over 100 species of mollusks, nautiloids, clams, and gastropods, and rare species of bryozoans (moss animals), brachiopods (lamp shells), crabs and lobsters, vertebrates (fish and marine reptiles), and terrestrial plants.

The fossils occur in a muddy sandstone, typically within large sandy calcareous concentrations that surround specimens of giant ammonites. The muddy sandstone accumulated from a series of storm-deposited marine sand bars near the western shoreline of a shallow sea that covered mush of the western interior of North America 75 million years ago.

The giant ammonites may have been washed onto the sands by storms after dying *en masse* following mating activities. Other fauna indicate a shallow marine depositional environment that received terrestrial plant debris from the shore. The concentration of fossils at this locality allows for a remarkable view into an ancient marine ecosystem. This site dates the age of the Rocky Mountains you see today, which appeared after this time.

All visitors should be able to enjoy searching for the fossils you found, so after you find them, leave them in place so others can enjoy their adventure as much as you have. The criminal penalty for the unauthorized or unpermitted removal of valuable invertebrate or any vertebrate fossils shall consist of a fine of not more than \$1,000, imprisonment up to one year, or both (43 CFR 8363).

SAFETY TIPS

High Clearance or 4-wd vehicles are recommended. Access roads become impassable when wet. So keep your eye on the weather.

Things you might want to take on your trip: water, sturdy shoes, insect repellant, and sun screen.

Things to remember: The Cretaceous Ammonite site was designated a Research Natural Area to protect the significant fossil resources and to preserver them for visitors to enjoy. You can help to protect the site by not removing or disturbing the fossils or making collection piles. Enjoy, But Don't Destroy! Take Only Pictures. Leave Only Foot Prints.

Kremmling Ammonite Site

