The sediment eventually reach the Gulf of Mexico via the Missouri and Mississippi drainage complex. The Yellowstone and the Bighorn rivers. Both streams are tributaries of the Yellowstone river. The water and carried Madison "A" zone (Little Tongue Member) is bounded by regional solution collapse zones and breccia deposits. Today, for 34 million years. Karst topography and solution collapse developed in the carbonate and evaporite beds. The upper shelf. After the seaway withdrew and before the Amsden transgression, the region was exposed to subaerial erosion 600 feet of cherty fossiliferous carbonate rocks of the Madison accumulated on this northern portion of the Wyoming

The Pryor Mountain area was a gently warped surface covered by a warm shallow ocean 345 million years ago. Over Montana: The Journal of Geology, Volume 48, Number 6, Table 1, p. 593-595; Image: After Van Gosen, B.S., Wilson, A.B., and Hammarstrom, J.M. with a section on Geophysics by Dolores M. Kulik, Stratigraphic column of rocks exposed in Pryor Mountains area. Image: Google Earth 60 million years ago Wisconsinian Glaciation (Owen); and Blackstone, D.L., Jr., 1940, Structure of the Pryor Mountains

The mountains expose Mississippian Madison Limestone (mainly blocks II, III, & IV) over a large area. The carbonate overlie 3 to 4 billion-year-old igneous and metamorphic crystalline basement rocks of the Wyoming Craton. The sedimentary rocks exposed in the Pryor Mountains span about 400 million years of geologic time. The strata plunge, faults in black lines with sawtooth symbol on upthrown side of reverse faults. Landscape developed a highly dissected karst topography. The Pryor's are noted for numerous canyons, caves, and rock

The region includes about 100 vision quest structures. The area also includes about 100 vision quest structures. According to Crow legend, a race of aggressive "Little People," known as Nirumbee inhabited the Pryor Mountains. These mythical beings were about eighteen inches tall, had large heads and pointed teeth. They were friendly with the

Archaeologists date human presence in the Pryors from about 12,000 years ago. Prehistoric hunter gathers left

The Crow's move into the Pryor Mountains to the north and east sides of the mountain blocks results in steep Nanks. Minimal faulting to the west and south results in

Erosion has carved rugged canyons, ravines and caves in uplifted Madison carbonate rocks. Major faulting along the

The American Bison was introduced into the Pryor Mountains by European-American herdsmen in the late 1870s. The Pryors became the "center of a new bison empire," according to Phillips. Since the 1870s, cattlemen have forced the Pryor prairie bison herds onto the mountainous areas to graze. In 1887, the U.S. Congress set aside the entire Pryor Mountain Wildlife Range as a "National Bison Range, which has been a "model of coexistence," according to Phillips

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History of Pryor Mountains

Native American people had been living in the Pryor mountains for thousands of years when Europeans arrived. The Crow and Blackfeet tribes were the first to arrive in the area. The Crow lived in the northern part of the mountains, while the Blackfeet lived in the southern part. The Crow were the first to arrive in the area, and they used the mountains as a place to hunt, fish, and gather wild plants. The Blackfeet arrived later, and they also used the mountains for hunting and gathering. The Crow and Blackfeet tribes had a long history of conflict with each other, and they also had conflicts with the U.S. government. In the late 19th century, the U.S. government tried to force the Crow and Blackfeet tribes onto reservations, but they continued to use the Pryor Mountains for hunting and gathering. Today, the Pryor Mountains are a important part of the Crow and Blackfeet culture, and they continue to use the mountains for hunting, fishing, and gathering. The Crow and Blackfeet tribes have a strong connection to the Pryor Mountains, and they work together to protect the area.
Jurassic Morrison Formation (155-148 million years ago) and equivalent units were deposited in a vast basin by streams eroding the western mountains. They signal the start of the Sevier Orogeny of the Cordilleran Thrust Belt. In and some skin from juvenile diplodocus sauropods. The site is about 2½ miles west of Bowler on the west bank of a 70-foot stream. The Jurassic Morrison Formation paleogeography, 150 million years ago. The future Pryor Mountains are shown by the small subsidiary anticline west of the Pryors. The area lies between Bridger Creek (east and north) and South Fork Creek (west).

The Morrison formation is a clastic sequence of sandstone, siltstone, mudstone and conglomerate rocks that are variously colored red, purple, brown and gray. They are deposits of rivers and lakes (Nuvial-lacustrine) that flowed into the northward retreating Sundance sea. The dinosaur beds contain rip up clasts that suggest a high energy environment. A Nood stage event accounts for the assemblage and rapid burial of fossils.


Uranium and vanadium ore generally occur in solution breccia zones within the Little Tongue member of the Madison Limestone. Uranium and vanadium ore is used by agriculture (sugar beets), decorative stone and construction industries.

Limestone has been quarried from the Upper Madison Mission Canyon beds three miles northeast of Warren, Montana since the 1950s. The stone has purity averages of 80 to 85 percent calcium, with some zones over 95 percent limestone content. The Madison Limestone lithostratigraphic chronology and sequence stratigraphic cross-section of Pryor Mountains area (Image: After Blakey, R., Colorado Plateau Geosystems, Arizona USA.)

125 Million Years Ago - Mississippian Madison Formation paleogeography, 345 million years ago

Jurassic Morrison Formation paleogeography, 150 million years ago. The future Pryor Mountains are shown by the small subsidiary anticline west of the Pryors. The area lies between Bridger Creek (east and north) and South Fork Creek (west).
The Pryor Mountain Wild Horse Range, the nation's first wild horse management area, was created in 1968. Habitat there varies by elevation, water, and season. Vegetation ranges from shrub-grassland, river margin (riparian), to subalpine forest and meadows. Elevations vary from 3,700 to over 8,700 feet above sea level.

Pryor Mountains habitats.
Image: http://www.pryormountains.org/pryors-coalition/

Horses had been extinct in North America for about 10,000 years until the Conquistadors reintroduced them. In 1680, during the Pueblo Uprising, many horses escaped or were captured from the Spanish. Genetic studies of the Pryor Mountain wild horses showed they have traits consistent with Spanish horses. The Pryor herds may also include bloodlines from the horses that Sergeant Pryor lost over 200 years ago in the Yellowstone Valley. Many of the Pryor horses have distinctive dorsal stripes on their backs and "zebra" stripes on their legs.

Primitives markings on Dun colored horses.

Things To Do

Big Pryor Mountain and East Pryor Mountain located in the southern half of the Pryor Mountains has public access on the Custer National Forest, BLM and the Bighorn Canyon National Recreation Area. The northern half of the Pryor Mountains is located on the Crow Indian Reservation and is not open to the public.

On Big Pryor Mountain and East Pryor Mountain there are numerous places to hike. These mountains also have endless miles of dirt roads making it OHV heaven. The Pryor Mountains website has detailed descriptions and maps of how to get there, hikes, roads, camping, natural history, and cultural history.

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