BUFFALO GAP NATIONAL GRASSLAND



Fall River Ranger District, (605) 745-4107

ROCKHOUND GUIDE

South Dakota is acknowledged to be a virtual paradise for those who are interested in rocks, minerals, gemstones, and fossils. It is also one of the major areas for studying field geology.

The widespread badlands of western South Dakota offer the rockhound thousands of acres of interesting collection for a wide spectrum of colorful gem materials. Most sought after is the brightly patterned fairburn agate, an elusive and distinctive agate, the official State Gem of South Dakota. Rock beds are scattered in eroded areas, the best known bed is in the Fairburn area near the French Creek Campground. Rock hunting (surface collection of rocks and agates, excluding meteorites and fossils), for personal, hobby, and noncommercial use only, is allowed without a permit. For other uses of rock material, contact the local Forest Service Office. Trading, bartering, or selling rocks and agates from National Forest System Lands are not allowed. Collecting on private land requires the owner's permission.

Some of the rocks and minerals listed below are a few that can be found on the Buffalo Gap National Grassland and surrounding areas.

BANDED JASPER, BLACK AGATE, ROSE QUARTZ, BUBBLE GUM AGATES, EYE AGATE, CHALCEDONY, JASP-AGATE, FAIRBURN AGATE, MOSS AGATE, PRAIRIE AGATE, WATER AGATE, RATTLE STONES, PUDDINGSTONE CONGLOMERATE

METEORITES

Meteorite is a stony or metallic object from interplanetary space that has fallen to the earth's surface. The collection of meteorites for personal, hobby, educational, and noncommercial use is allowed without a permit.

ARTIFACTS

Archeological resource means any material remains of prehistoric or historic human life or activities, which are at least 50 years old, and includes the physical site, location, or context in which they are found (36 CFR 261.2).

The collection of projectile points, pottery, or any other archeological resource or artifact is not allowed (36 CFR 261.9 (h) without a permit. Projectile points include 'arrowheads' and any prehistoric human-modified stone.

FOSSILS

Fossil (Paleontological) resource means any evidence of fossilized remains of multicellular invertebrate and vertebrate animals and multicellular plants, including imprints thereof (36 CFR 261.2). There are four major types of fossils: ichnofossil (a.k.a. imprint or trace fossil), plant, invertebrate, and vertebrate.

Ichnofossils (or trace fossils) are typically sedimentary structures consisting of a fossilized track, trail, burrow, or tube resulting from the life activities and behavior of an animal, such as a mark made by an invertebrate creeping, feeding, hiding, or resting on or in soft sediment. Some non-sedimentary examples include tooth marks (resulting from predation), skin impressions, and coprolites (fossil dung).

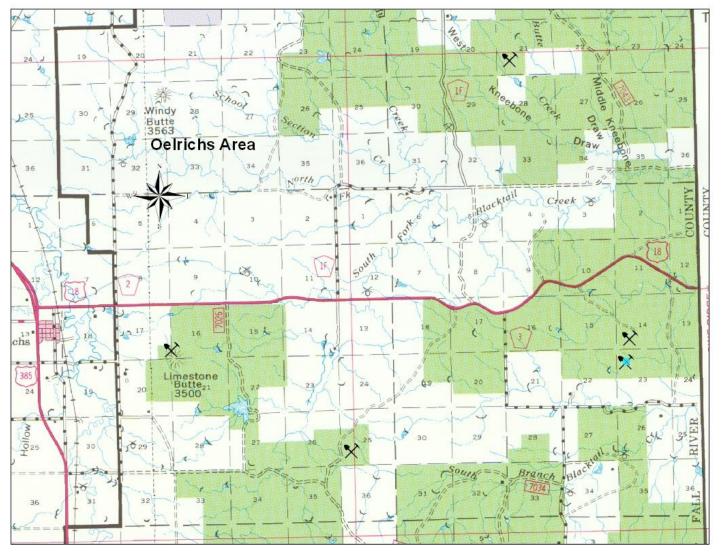
Fossil plants are the fossilized remains of all parts of a plant. Petrified wood is a common term used for wood fossilized by silica, where the woody structure is visible. A permit is not required to collect petrified wood for personal, hobby, and noncommercial use. A permit may be required to remove petrified wood from National Forest System Lands for nonpersonal, scientific, and commercial purposes.

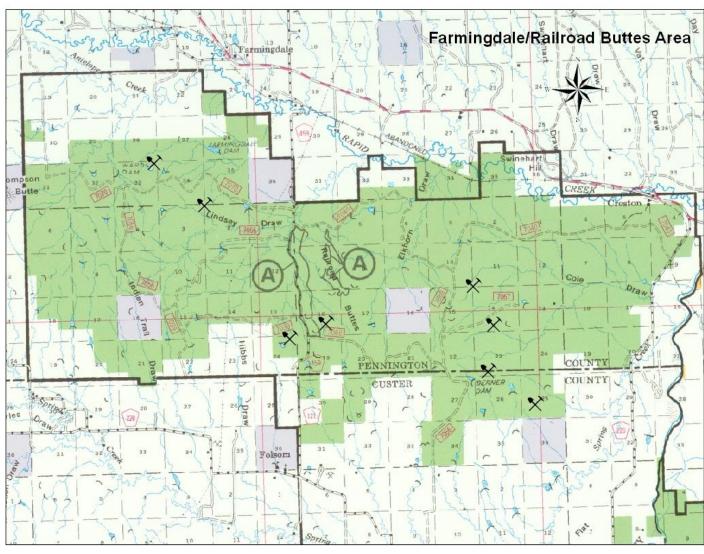
Invertebrate fossils are the fossilized remains of animals lacking a backbone. A few examples include: ammonites, trilobites, snails, clams, and insects. Invertebrate and plant fossils (including invertebrate and plant trace fossils) <u>may be collected without a permit,</u> from the surface without digging and for personal, hobby, educational, and noncommercial use only. A permit is required for research/scientific purposes.

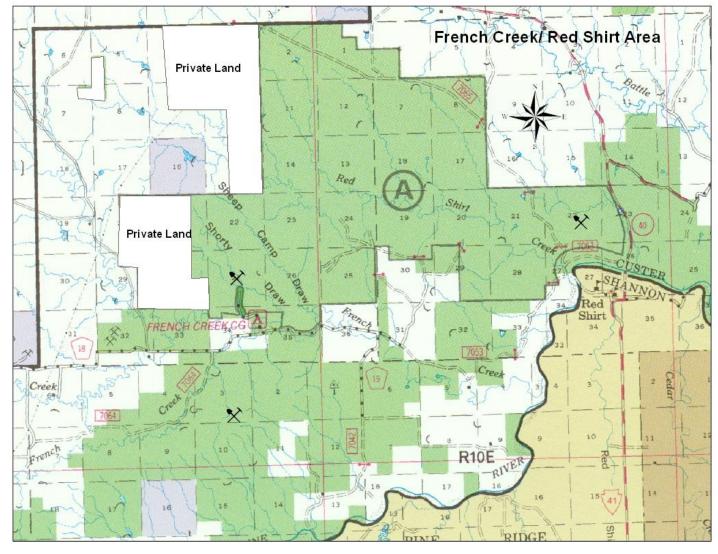
Vertebrate fossils are the fossilized remains of any animal having a bony skeleton or backbone such as: fish (includes sharks and rays), amphibians, reptiles (including dinosaurs, mosasaurs, and turtles), birds, mammals, and all trace fossils from vertebrate animals, such as dinosaur tracks.

The collection and/or duplication of vertebrate fossils, including vertebrate trace fossils, from National Forest System Lands requires a permit (36 CFR 261.9 (i)). Permits are issued to qualified paleontologists, who curate fossils and their duplicates into federally approved facilities.

No permits for the collection of any fossils (plants, invertebrates, vertebrates, or any trace fossils) are issued for commercial purposes, except for petrified wood. Trading, bartering, or selling any fossil material (plants, invertebrates, vertebrates, or any trace fossils) removed from National Forest System Lands is prohibited.







For more information, including publications pertaining to the collection of rocks, minerals, and gemstones, write to South Dakota Geological Survey, 414 East Clark, Vermillion, SD 57069-2390, or call (605) 677-5227. A geology museum is located on the campus of the South Dakota School of Mines and Technology, 500 St Joseph, Rapid City, SD 57701.

Maps of the Buffalo Gap National Grassland are available at the Fall River Ranger District Office, 1801 Highway18 Bypass, Hot Springs, SD 57747. Maps may be obtained by mail by either calling 605-745-7020 or via the web at www.blackhillsparks.org/bookstore.htm.

Additional areas for rockhounding are listed below:

USDA, Forest Service Buffalo Gap National Grassland 1801 Highway 18 Bypass Hot Springs, SD 57747 (605) 745-4107

USDA, Forest Service National Grassland Visitor Center P. O Box 425 708 Main Street Wall, SD 57790 (605) 279-2125

USDA, Forest Service Thunder Basin National Grassland 809 S. 9th Douglas, WY 82633 (307) 358-4690 USDA, Forest Service Grand River National Grassland P.O. Box 390 Lemon, SD 57636 (605) 374-3592

USDA, Forest Service Oglala National Grassland 125 N Main Chadron, NE 69337 (308) 432-0300

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