

Slate



A Piece of Slate Found on Kuse Property

Characteristics of Slate

Slate is a metamorphic rock formed from mudstone or shale. Intense pressure forces the clay minerals in the shale to align themselves in a parallel manner. . . . The strong alignment of its mineral grains allows slate to break into thin, flat sheets. (Arem, p. 138) Muscovite and chlorite are the principal constituents. (Chesterman, p. 732) Black is the common color, but other minerals cause it to be different colors. "In a few locations, colored slate occurs in red, brown, green, and yellow, often with attractive streaking and texture." (Busbey p. 152) Slate containing abundant chlorite is green. (Arem, p. 138)

Chesterman gives the following characteristics of slate.
"Texture: Dense; crystalline on microscopic scale (slate); or small crystals visible to the naked eye (phyllite); may contain porphyroblasts (e.g. garnet, andalusite).
Structure: Slaty foliation produced by alignment of mica flakes in parallel planes along which rock splits readily into thin sheets; larger, visible mica flakes and wavy to crinkly foliation are characteristic of phyllite. Relict bedding may be visible as color bands cutting across the foliation.
Color: Usually medium to dark gray to black (from enclosed carbonaceous matter and graphite), occasionally green (from chlorite), or red, purple, brown, or yellow (from iron oxides).

Luster: Distinct but weak on slaty foliation planes; pronounced silky sheen on phyllitic foliation.
Hardness: Easily scratched with knife blade.” (Chesterman, p. 732)

Locations Where Slate is Found

It is commonly found in the roots of old folded mountain chains, such as the Appalachians in the USA, and the Alps in Europe. (Busbey, p. 152) An article in the newspaper in 1886 claimed that slate was found in abundance in Taylor County, Wisconsin. An 1890s Taylor County Plat book showed this location for minerals listed in the article.



T30R1W Holway Taylor County Map

(Taylor County Star and News December 11, 1886)
Current residents cannot seem to identify or remember the location of any such deposits.

Uses for Slate

Throughout history it was used on roofs, paths for flagstones, and as slates and blackboards on which to write messages.

Early immigrants who came through Castle Gardens in New York, the predecessor of Ellis Island, saw information posted on blackboards. An article from Harper's Monthly printed in 1870 stated that exchange rates for money were posted on a blackboard. "A blackboard conspicuously displayed announces the current rates at which foreign and domestic coin are exchanged—a rate that is but a trifle below the Wall Street quotation. Whenever a change takes place in the street it is instantly reported to the brokers in the Garden, and the rate on the blackboard altered accordingly." The same article stated that a blackboard was used to post the names of arriving vessels. "A large blackboard shows the name of the steamers or ships that are reported "up," whose passengers are being or will be landed." (Day In Castle Garden. New York. Article removed from Harper's Monthly XLII. June to November 1870.)

In 1883, Medford's first physician, Dr. Hubble, communicated with patients by having them leave messages on the "office slate." The newspaper article states the following: "Dr. Hubbell will be found in his office from 8 to 9 in the morning, 1 to 2 in the afternoon. Calls left on the office slate will be promptly attended to." (The Star and News, November 10, 1883)

Pupils in early Taylor County schools used slates and blackboards made of slate. In 1895, slate pencils were purchased for the Spruce Grove School in the Town of Deer Creek, District 5.



Slates Used by Herman Oehlert and Johann Peter Kuse
(Photo – Kuse Museum and Nature Preserve)

Blackboards were essential items in public and private schools. St. Paul's Ev. Lutheran Church had a large blackboard in the building that served as a place for Sunday and weekday education. (Kuse, Kuse and Retzer, p. 28) The manual published by the Medford, Wisconsin School Board for 1901-1902 listed the following as a necessity for first grade classrooms. "FIRST GRADE: --Work to be given from the blackboard until pupils have acquired a vocabulary large enough to make reading in the primer profitable." (Medford School Board, 1901-1902) A law was passed to improve schools. In order to have a first class school. The following things are required to become a first class school. "At least eighty square feet of good blackboard." – (Large schools need from 100 to 120 square feet) (Taylor County Star-News. August 14, 1908)

The blackboard was used by business people. Rusch tells of its use by a Rib Lake Lumber Company. A photo in his book shows that use. "Inside shots of the mill are rare. This one shows riders on the carriage pulling the levers which determined the thickness of the log cut. In the background is a

blackboard. The Company saw to it that the number of board feet cut each day was posted.” (Rusch, p. 18)

Blackboards and slates have been replaced by pencils, paper, pens and computers. What will be commonly used in the future?

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