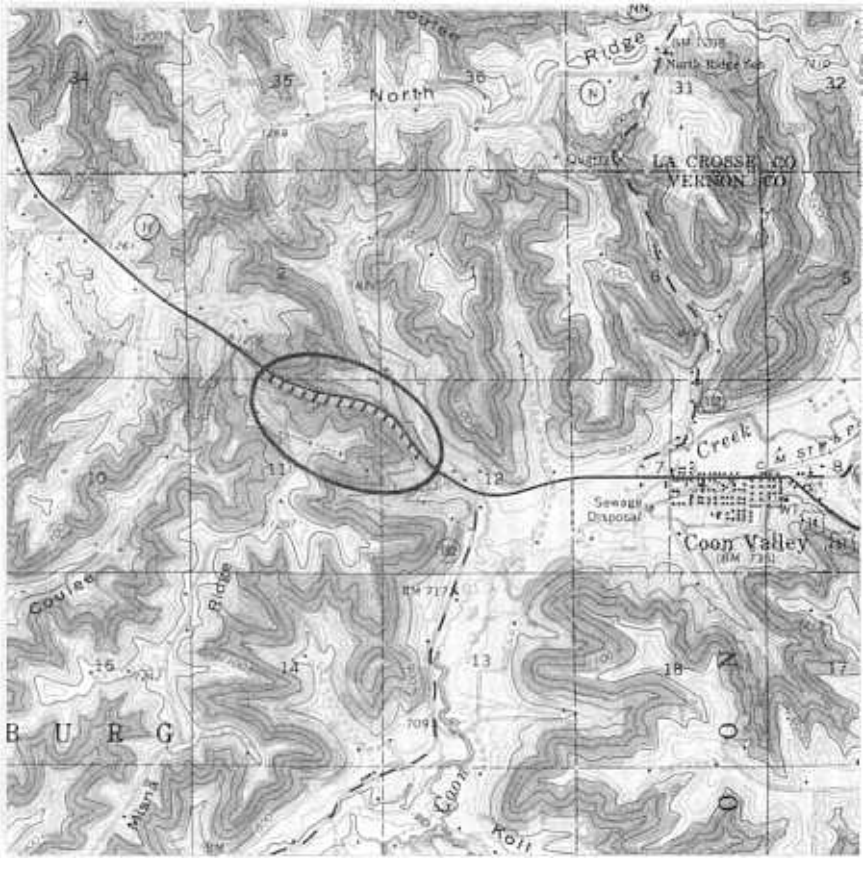
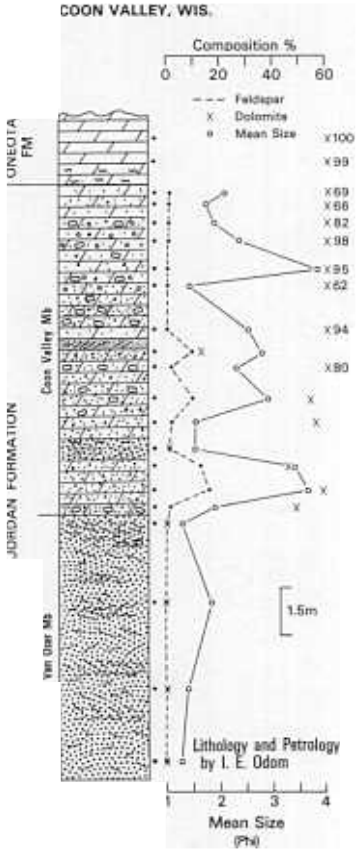
Title: Coon Valley West

Location: Type section of the Coon Valley Member of the Jordan Foundation located on the south side of U. S. Highway 14 two miles west of the City of Coon Valley in the NW$\frac{1}{4}$, NE$\frac{1}{4}$, Sec. 11, T.14N., R.6W., Vernon County (Stoddard 15-minute topographic quadrangle, 1965).





Author: M. E. Ostrom (modified from Odom and Ostrom, in press).

Description: The Coon Valley Member is the uppermost of four members which comprise the Jordan Formation in central and western Wisconsin, eastern Minnesota and northern Iowa. The basal member is a very fine-grained sandstone called the Norwalk. It is overlain by the Van Oser, a medium to fine-grained sandstone, which is considered to be the basal member of the upper Jordan Formation. In most areas, the Van Oser is in sharp contact with the overlying thinly bedded, dolomitic sandstones, sandy dolomites and sandstones containing coarse to fine poorly sorted quartz sand, abundant intraclasts, sand-cored oolites, and shale interbeds. This lithic unit ranges in thickness from 52 feet at Genoa to 11 feet in east Madison, Wisconsin, and is named the Coon Valley Member. In and near Madison the Van Oser Member contains a local facies of very fine-grained, highly feldspathic (20 - 40%), dolomitic and non-dolomitic sandstone called the Sunset Point Member. At its type section, the

Sunset Point is underlain by the Van Oser Member and overlain by the Coon Valley Member; but just a few miles to the east, the Sunset Point is both overlain and underlain by the Van Oser. No lithic correlation of the Sunset Point Sandstone is found in western Wisconsin.

Following is a description of the Coon Valley type section from Odom and Ostrom (in press):

ORDOVICIAN SYSTEM

Oneota Formation

68.0'-75.0'+	7.0'+	Unit 14-Dolomite, gray massive, vuggy, some very fine sand in lower one foot. (7' + ft.)
67.0'-68.0'	1.0'	Unit 13-Dolomite, gray, abundant stromatoliths. (1 ft.)

CAMBRIAN SYSTEM
Jordan Formation

Coon Valley Member (37 feet)

65.5'-67.0'	1.5'	Unit 12-Dolomite, grayish brown, massive, sandy. (1.5 ft.)
64.5'-65.5'	1.0'	Unit 11-Sandstone and Sandy Dolomite, brown, medium-grained, friable, (1 ft.)
61.5'-64.5'	3.0'	Unit 10-Dolomite, grayish-brown, massive, contains abundant coarse sand. (3 ft.)
56.5'-61.5'	5.0'	Unit 9-Dolomite, grayish-brown, massive, vuggy, moderately sandy, scattered intraclasts. (5 ft.)
54.5'-56.5'	2.0'	Unit 8-Dolomite, brownish-gray, very sandy, sand ranges from coarse to fine-grained, massive, numerous clasts, irregular upper contact. (2 ft.)
51.5'-54.5'	3.0'	Unit 7-Sandstone, brown, poorly sorted, contains large sandstone and sandy dolomite intraclasts. Irregular upper contact. (3 ft.)
47.5'-51.5'	4.0'	Unit 6-Sandstone and Sandy Dolomite, brown, fine-grained, thinly bedded, moderately well sorted, friable locally. (4 ft.)
42.5'-47.5'	5.0'	Unit 5-Dolomite and Dolomitic Sandstone, brown, fine to medium grained, poorly sorted, intraclasts throughout but especially abundant at base, vuggy in upper 2'.(5 ft.)
38.5'-42.5'	4.0'	Unit 4-Sandstone and Sandy Dolomite, brown, coarse to fine-grained, poorly sorted, thinly bedded, intraclasts and green shale streaks in upper 2', white sand lenses in lower 2'. (4 ft.)
32.0'-36.5'	4.5'	Unit 2-Sandstone, brown, coarse to fine-grained, very dolomitic thinly to massively bedded, cross bedded locally, moderately well sorted in upper 2-1/2 feet, poorly sorted in lower 2'. (4.5 ft.)

30.0'-32.0'	2.0'	Unit 1-Sandstone, brown, coarse to fine, poorly sorted thinly bedded at base, numerous clasts in upper 1', secondary calcite in lower few inches (2 ft.)

Van Oser Member (30 feet)

0.0'-30.0'	30.0'	Sandstone, white, iron-stained in upper 2', medium-grained massive to highly cross bedded, well sorted, secondary calcite in upper 2 ft. (30 ft.)

Norwalk Member (9 feet)
Van Oser Member (11 feet)
Norwalk Member (21 feet)

St. Lawrence Formation (19 feet)
Lone Rock Formation (+11 feet)

BASE OF EXPOSURE

The feldspar and dolomite content and mean grain size is shown by an accompanying diagram (Odom and Ostrom, in press).

Significance: This exposure shows clearly the lithologic character of three of the members of the Jordan Formation as well as the contact relationships and lithologic character of the enclosing formations.

Note especially the lithology of the various units. Have you seen them before? What sedimentary structures can you identify? Fossils? What is their significance? What were the environments of deposition of the different units? Beach? Tidal? Reef? What was the direction and possible character of the source of sediment? How do you explain the high feldspar content in the Coon Valley Member as shown by the accompanying diagram? Although you have not seen the Sunset Point, how might you explain its local distribution in the area of Madison? In forming your answer consider the direction of sediment transport and any geologic features which coincides with that direction.

References; Odom and Ostrom in press)