

THE MEIGS CREEK COAL "LOWER SPLIT" IN SHORT CREEK TOWNSHIP, HARRISON COUNTY, OHIO

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The unweathered exposures on the highwalls of a large number of extensive strip pits in Short Creek Township, Harrison County, Ohio offer unusual opportunities to study the stratigraphy of the Monongahela Series (Upper Pennsylvanian) in great detail. The township is located in the extreme southeastern corner of Harrison County and is about 20 miles southwest of Steubenville. This paper summarizes some of the results of intensive study of these rocks by the writer in August 1953 under the auspices of the Geological Survey of Ohio and is intended merely as a factual presentation of stratigraphic data with no implications concerning cyclic sedimentation.

PREVIOUS INVESTIGATIONS

Until the summer of 1953 the stratigraphy of the Monongahela Series in southeastern Harrison County had not been studied except by reconnaissance methods. Detailed work in this area was first undertaken by Condit (1912) when he reported on the underlying Conemaugh Series in Ohio. Then Lamborn (1930) described the Monongahela Series in Jefferson County which adjoins Short Creek Township on the east. As recently as 1947 White described the Waynesburg coal and its stratigraphic relations in Harrison and northern Belmont Counties.

NOMENCLATURE

In Short Creek Township the stratigraphic section between the Fishpot and Meigs Creek coals is of particular interest since it contains a persistent coal horizon that in the past has been overlooked (Stout, 1930, 1939, 1947) or possibly confused with the Fishpot coal not only in the field but in the literature as well. Since this coal bed is known to underlie large areas in both Harrison and Belmont Counties, the writer believes that it is an essential part of the standard stratigraphic section for Ohio and in the future should be recognized as such.

The regional relations of this additional coal horizon are as yet uncertain but there is considerable evidence that the interval between it and the Meigs Creek coal decreases toward the west and south from Short Creek Township. The "new" bed thus appears to be a split from the Meigs Creek coal and therefore, has been tentatively referred to as the Meigs Creek coal "Lower Split" by some members of the Geological Survey of Ohio. Since the cyclic relations of this bed are not known and the stratigraphic nomenclature for the rocks of the Pennsylvanian System is so unsettled, the writer is of the opinion that the name "Lower Split" is as descriptive as any. To propose an entirely new name would simply add to the confusion.

STRATIGRAPHY

In general the Meigs Creek coal "Lower Split" in Short Creek Township is a black, moderately fissile, thin-bedded shale from 4 to 10 in. thick. The sequence of strata both above and below the black shale is dominantly fine to coarse clastic sediments forming variable amounts of gray to brown shale, siltstone and sandstone.

Since the coal beds are the most persistent units of the Monongahela Series in eastern Ohio the best method to describe the stratigraphic position of the Meigs

Creek coal "Lower Split" is to note its relation to the adjacent named coal beds. In Short Creek Township the average of six measured stratigraphic sections including the thickness of the interval between the underlying Fishpot coal and the "Lower Split" is 31ft.; the range is 27 to 38 ft. Similarly, the average of seven sections of the interval between the "Lower Split" and the base of the overlying Meigs Creek coal is 14 ft.; the range is 11 to 17 ft. (table 1). In the same area the "Lower Split" is 61 to 92 ft. above the base of the Pittsburgh coal and 43 to 67 ft. above the Redstone coal.

TABLE 1

Generalized stratigraphic section of the Monongahela series in Short Creek Township showing the relationship of the Meigs Creek coal "lower split" to other named units

Lithology	Thickness in ft.
Coal, bright, blocky. <i>Waynesburg</i>	4
Sandy shale and sandstone. <i>Uniontown-Gilboy</i>	21-41
Coal and black shale. <i>Uniontown</i>	1
Shale, sandstone, and limestone.....	42-50
Interbedded green shale and gray limestone. <i>Fullon</i>	2-10
Limestone, argillaceous, gray, soft. <i>Benwood</i>	30-50
Shale and sandstone, brown to gray.....	10-15
Coal, bright, blocky. <i>Meigs Creek</i>	2-5.25
Sandy shale and sandstone.....	11-17
Shale, black. <i>Meigs Creek coal "Lower Split"</i>	0.33-0.8
Sandy shale and sandstone.....	27-38
Shale, black. <i>Fishpot coal horizon</i>	0.67-0.9
Limestone, argillaceous, gray to tan. <i>Fishpot</i>	24-36
Coal and black shale. <i>Redstone</i>	0.5-2
Claystone and limestone. <i>Redstone limestone</i>	20-32
Coal, bright, blocky. <i>Pittsburgh</i>	5

There is a very accessible exposure of the Meigs Creek coal "Lower Split" and the intervals to the Fishpot and Meigs Creek coals on the highwall of an abandoned strip pit just south of U. S. Highway No. 250 in the extreme northeast corner of the SW $\frac{1}{4}$, Section 26 of Short Creek Township. These same coals are also well exposed in the road cut above the highwall in the SE $\frac{1}{4}$, NE $\frac{1}{4}$, Section 15 and on the highwall in the SW $\frac{1}{4}$, NE $\frac{1}{4}$, Section 13 of the same township.

LITERATURE CITED

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