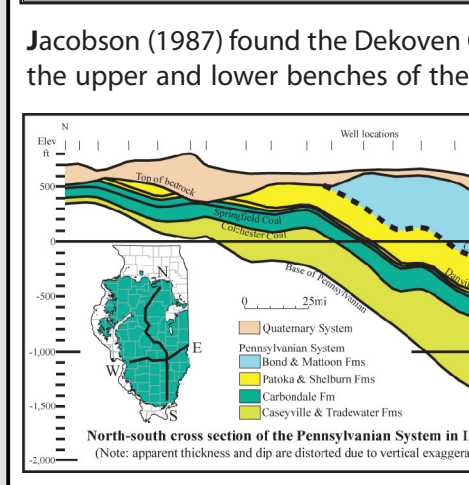
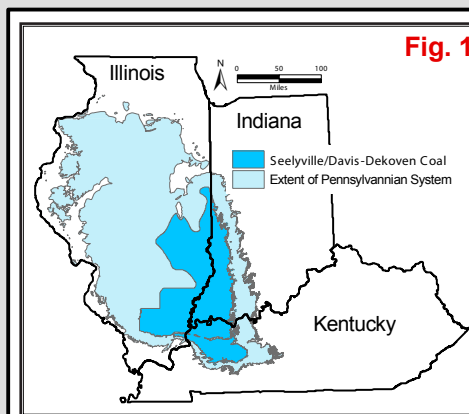
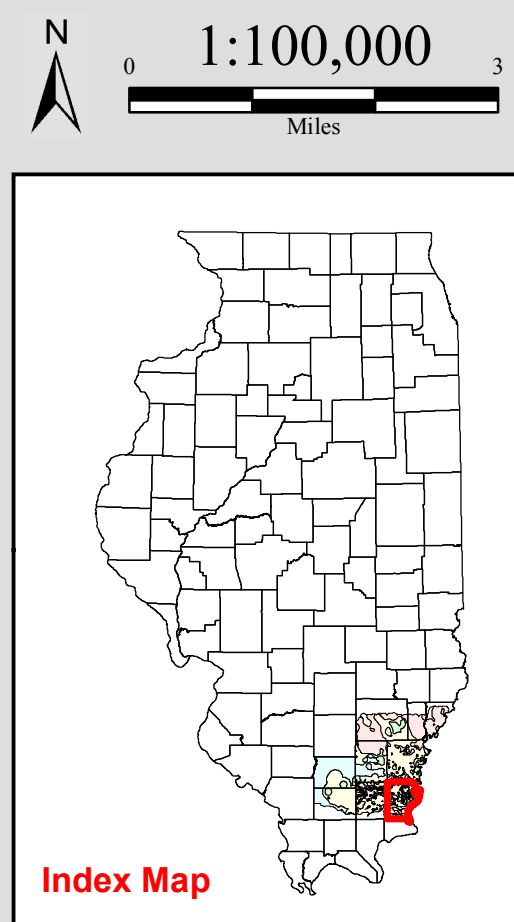
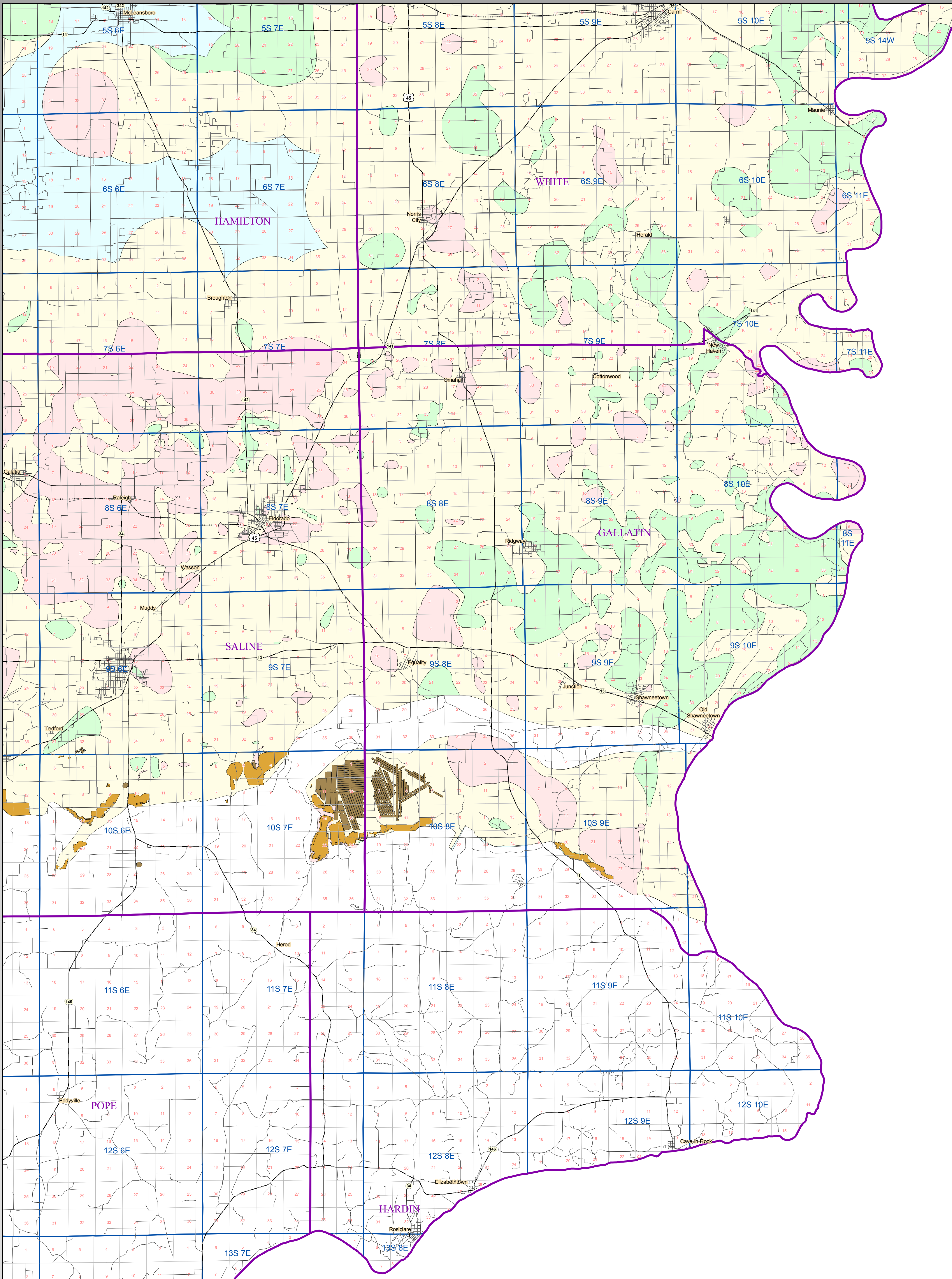


Dekoven Coal Thickness

GALLATIN

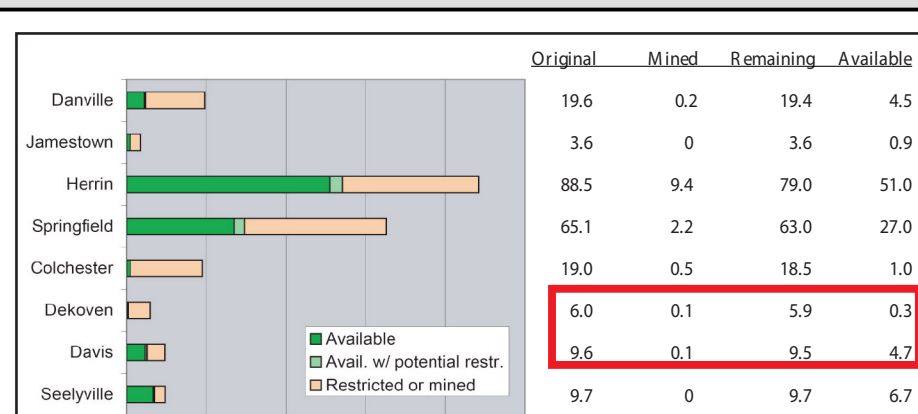
County



The Dekoven and Davis Coals underlie southern Illinois as well as portions of western Indiana and western Kentucky. The coals crop out along the eastern and southern margin of the Illinois Basin. (See Fig 1 and Fig 2) The Dekoven and Davis coals occur near the base of the Desmoinesian Series (See Fig 4). In Illinois, the Dekoven and Davis Coals have been mined mainly along outcrop in the southern part of its range, and in a few underground mines in Saline and Gallatin counties.

Jacobson (1987) found the Dekoven Coal and underlying Davis Coal to be equivalent to the upper and lower benches of the Seelyville Coal. The Dekoven and Davis coals are also thought to be correlative to the Wiley and Greenbush coals in North and Western Illinois (See Fig 4).

The Dekoven Coal is typically overlain by gray silty shale and siltstone or in places by massive, thick sandstone. These units are laterally variable. The Davis Coal is usually

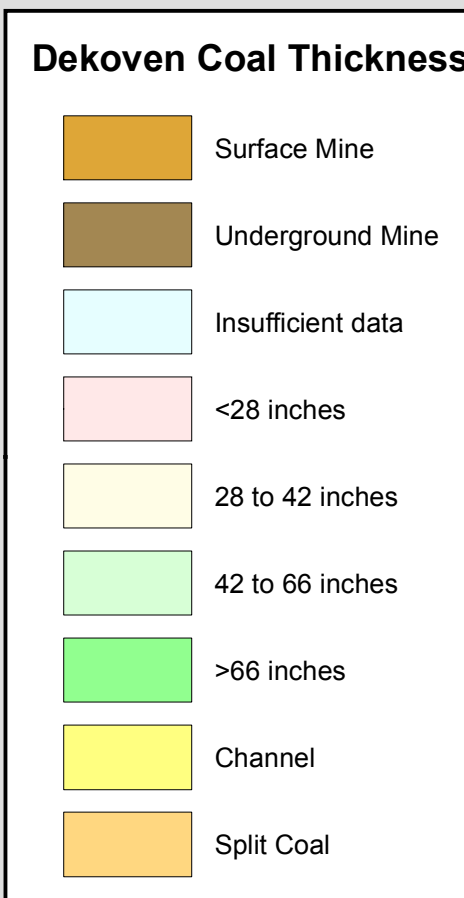
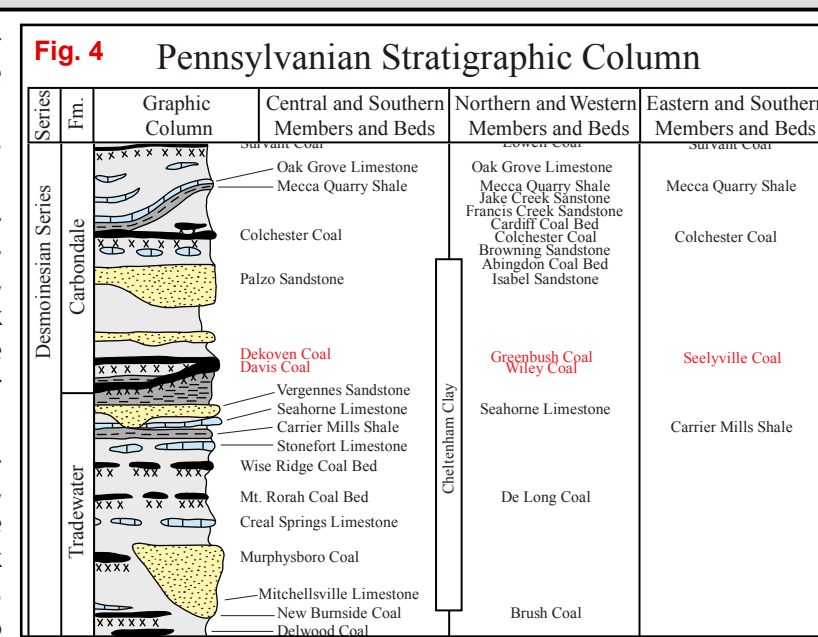


overlain by about 5 feet of marine black shale, with some local areas being gray silty shale or siltstone. In southeastern Illinois, a parting occurs in the Dekoven Coal, producing a lower split called the lower Dekoven Coal that is usually less than 28 inches thick. This lower split lies a few inches below the main Dekoven Coal seam in the southern portion of mapped Dekoven Coal area and up to 40 feet below in the north. (Modified from ISGS Pub. IM 124, Korose, et al.)

The original resources of Dekoven and Davis coals in the State of Illinois totals 15.6 billion tons, 0.2 billion of which have been mined. Approximately 32% of the original resources, 5 billion tons, are considered available for mining

(See Fig 3). Available means that the surface land-use and geologic conditions related to mining of the deposit (e.g. thickness, depth, in-place tonnage, stability of bedrock overburden) are comparable to other coals currently being mined in the state. Of these resources, 4.7 billion tons are 42 to 66 inches thick and 0.2 billion tons are greater than 66 inches thick. (Modified from ISGS Pub. IM 124, Korose, et al.)

References:
- Jacobson, R.J., 1987, Stratigraphic correlations of the Seelyville, Dekoven, and Davis Coals of Illinois, Indiana, and western Kentucky: Illinois State Geological Survey, Circular 539, 27 p.
- Christopher P. Korose, Colin G. Trevenge, Russell J. Jacobson, and Scott D. Elrick, 2002, Availability of the Danville, Jamestown, Dekoven, Davis, and Seelyville Coals for mining in Selected Areas of Illinois: Illinois State Geological Survey Illinois Minerals 124, 44p.



Map Explanation

The maps and digital files of this study were compiled from data from a variety of public and private sources and have varying degrees of completeness and accuracy. They present interpretations of the geology of the area and are based on available data. However, these interpretations are based on data that may vary with respect to accuracy of geographic location, type, quantity, and reliability, as they were supplied to the Illinois State Geological Survey. Consequently, the accuracy of the interpreted features shown in these files is subject to the limitations of the data and varies from place to place.

Contoured features less than 7 million square feet (about 1/2 mile square) in area may not be accurately portrayed or resolved. This data set provides a large-scale conceptual model of the geology of the area on which to base further work. These data are not intended for use in site-specific screening or decision-making. Data included in this map are suitable for use at a scale of 1:100,000.

Disclaimer

The Illinois State Geological Survey and the University of Illinois make no guarantee, expressed or implied, regarding the correctness of the interpretations presented in this data set and accept no liability for the consequences of decisions made by others on the basis of the information presented here.

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