ILLINOIS AT URBANA-CHAMPAIGN Institute of Natural Resource Sustainability William W. Shilts, Executive Director ILLINOIS STATE GEOLOGICAL SURVEY

Institute of Natural Resource Sustainablity

E. Donald McKay III, Interim Director

Illinois State Geological Survey 615 East Peabody Drive Champaign, Illinois 61820-6964

For more information contact:

http://www.isgs.illinois.edu

(217) 333-4747

# Herrin Coal Thickness RANDOLPH County

County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

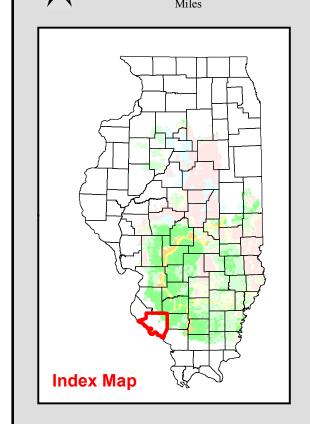
Map construction: October 28, 2009

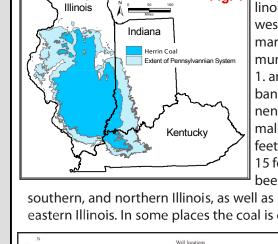
This product is under review and may not meet the

standards of the Illinois State Geological Survey.

County coal maps and select quadrangle maps available as downloadable PDF files at: http://www.isgs.illinois.edu/maps-data-pub/coal-maps/county-index.shtml

2S 8W 2S 7W 2S 5W 2S 4W WASHINGTON /3S 10W 3S 8W MONROE 4S<sup>-</sup>10W 4S 9W 4S 8W PERRY 5\$\frac{10W}{} RANDOI 6S 9W Grove 68.7W 6S 6W 7S 7W 788W 7S 5W 8S 4W 9S%4W

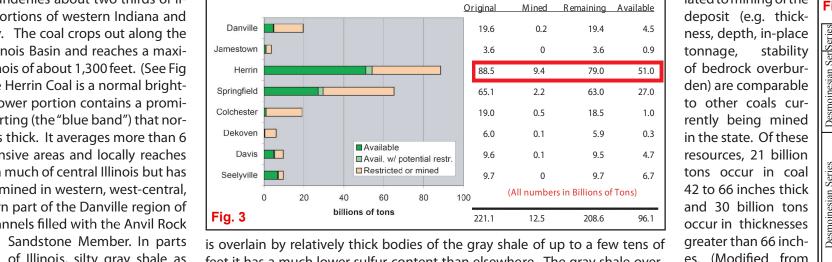




**The Herrin Coal** underlies about two thirds of Illinois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,300 feet. (See Fig I. and Fig 2.) The Herrin Coal is a normal brightbanded coal. Its lower portion contains a prominent claystone parting (the "blue band") that normally is 1-3 inches thick. It averages more than 6 feet thick in extensive areas and locally reaches 15 feet. It is thin in much of central Illinois but has

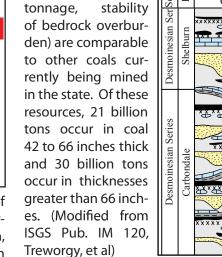
much as a mile wide and 60-

been extensively mined in western, west-central, southern, and northern Illinois, as well as in the southern part of the Danville region of eastern Illinois. In some places the coal is cut out by channels filled with the Anvil Rock



of Illinois, silty gray shale as feet it has a much lower sulfur content than elsewhere. The gray shale over- es. (Modified from much as 100 feet thick over- lies the coal principally in parts of Williamson, Franklin, Jefferson, Madison, ISGS Pub. IM 120, lies the Herrin Coal. Associ- St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Herrin Treworgy, et al) ated with this shale is a chan- Coal is overlain by either the Anna Shale Member (black fissile shale) or the nel sandstone commonly as Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.)

80 feet thick mapped as Anvil The original resource of Herrin Coal in the State of Illinois totals 88.5 billion References: contemporaneous with the Herrin Coal resources, 51 billion tons, are considered available for mining. (See coal. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re-



deposit (e.g. thick-

ness, depth, in-place

Members and Beds Members and Beds
Danville Coal Danville Coal Danville Coal - Galum Limestor - Allenby Coal vil Rock Sandstone Anvil Rock Sandstone Lawson Shale Conant Limestone Anna Shale Anna Shale Herrin Coal Briar Hill Coal Canton Shale Excello Shale Houchin Creek Coal Excello Shale
Houchin Creek Coal
Breezy Hill Limestone
Kerton Creek Coal
Pleasantview Sandstore

Pennsylvanian Stratigraphic Column

Rock Sandstone and may be tons, of which 9.4 billion have been mined. Approximately 58% of the original - Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p. - Treworgy, C.G., C.P. Korose, C.A. Chenoweth, and D.L. North, 1999a, Availability of the Herrin Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 120, 54 p.

### **Coal Thickness** Surface Mine **Underground Mine** Insufficient data <28 inches 28 to 42 inches 42 to 66 inches >66 inches

Channel

Split Coal

# **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.

## 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. © 2009 Board of Trustees of the University of Illinois. All rights reserved.