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Herrin Coal Chlorine SALINE County

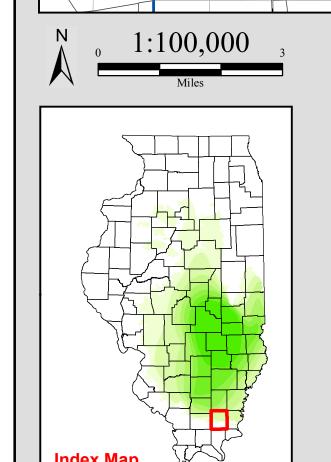
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

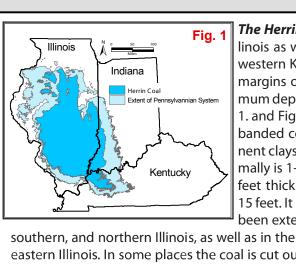
Map construction: October 29, 2009

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

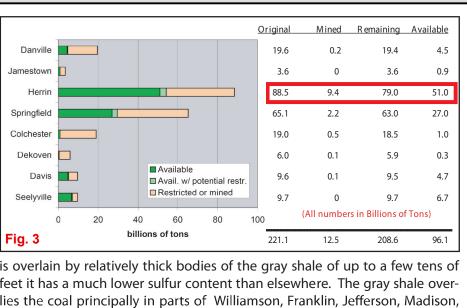
242 McLeansboro 5S 3E HAMILTON 0.4 to 0.5 percent 6S 6E 0.3 to 0.4 percent 6S 7E_ Broughton-7S 6E Cottonwood 8S 8E 8S 6E 8S 4E Johnston 0.1 to 0.2 percent Less than 0.1 percen 9S 8E Equality 9S 4E GALLATIN SALINE Less than 0.1 percen 0.1 to 0.2 percent WILLIAMSON 10S 9E 10S 8E 10S 7E Less than 0.1 percen 10S 5E 108 4E 10S 3E 11\$ 9E 11S &E 11S 7E 11S 6E 11S 3E HARDIN <u> 45</u> 12\$ 9E POPÉ 12S 7E 12S 6E 12S 5E 12S 4E Simpson 12S 8E JOHNSON





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 . 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 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 Sandstone Member. In parts is overl of Illinois, silty gray shale as feet it h much as 100 feet thick over- lies the lies the Herrin Coal. Associ- St. Clair, ated with this shale is a channel sandstone commonly as Brereton much as a mile wide and 60-Rock Sandstone and may be tons, of which 9.4 billion have been mined. Approximately 58% of the original contemporaneous with the Herrin Coal resources, 51 billion tons, are considered available for mining. (See North-south cross section of the Pennsylvanian System in Illinois



()	20	40	60	80	100		(All numbers	in Billions of To	ons)
			billions	of tons			221.1	12.5	208.6	96.1
co co cov	a m pal p aste erlai	uch le rincip rn Ma n by	ower su pally in acoupir	ulfur co parts c n, and t the Anr	ntent of Will S. Verr na Sha	than liams milior ale Me	elsew on, Fra n. Gend ember	here. The anklin, Jet erally, ho (black fis	o to a few e gray sha fferson, M wever the ssile shale	le ove ladisor Herri

	to other coals cur- rently being mined	Desmoir	She		Anvil Rock Sand Conant Lin Jamestown Brereton Li
f - ''	in the state. Of these resources, 21 billion tons occur in coal 42 to 66 inches thick and 30 billion tons occur in thicknesses greater than 66 inches. (Modified from ISGS Pub. IM 120, Treworgy, et al)	Desmoinesian Series	Carbondale	WANTE AND THE PROPERTY OF THE	Anna Shale Energy Sha Herrin Coal Briar Hill Coal Canton Sha St. David L. Turner Min Dykersburg Springfield Hanover Li Excello Sha Houchin Cr Roodhouse Coal Pleasantview San
1	References:				

lated to mining of the Fig. 4

deposit (e.g. thick-

ness, depth, in-place tonnage, stability

of bedrock overbur-

den) are comparable

- 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. In areas where the coal Fig 3.) Available means that the surface land-use and geologic conditions re-Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 120, 54 p.

Pennsylvanian Stratigraphic Column

Central and Southern Northern and Western Eastern and Southern Members and Beds Members and Beds Members and Beds

Brereton Limeston Anna Shale

St. David Limestone Turner Mine Shale

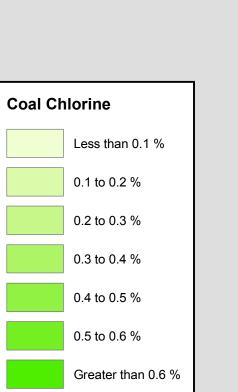
Springfield Coal

Hanover Limestone Excello Shale Houchin Creek Coal Breezy Hill Limestone Kerfon Creek Coal Pleasantview Sandstore

Anvil Rock Sandston

Brereton Limesto Anna Shale

Briar Hill Coal Canton Shale



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.

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