Institute of Natural Resource Sustainablity

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

Herrin Coal Chlorine GALLATIN

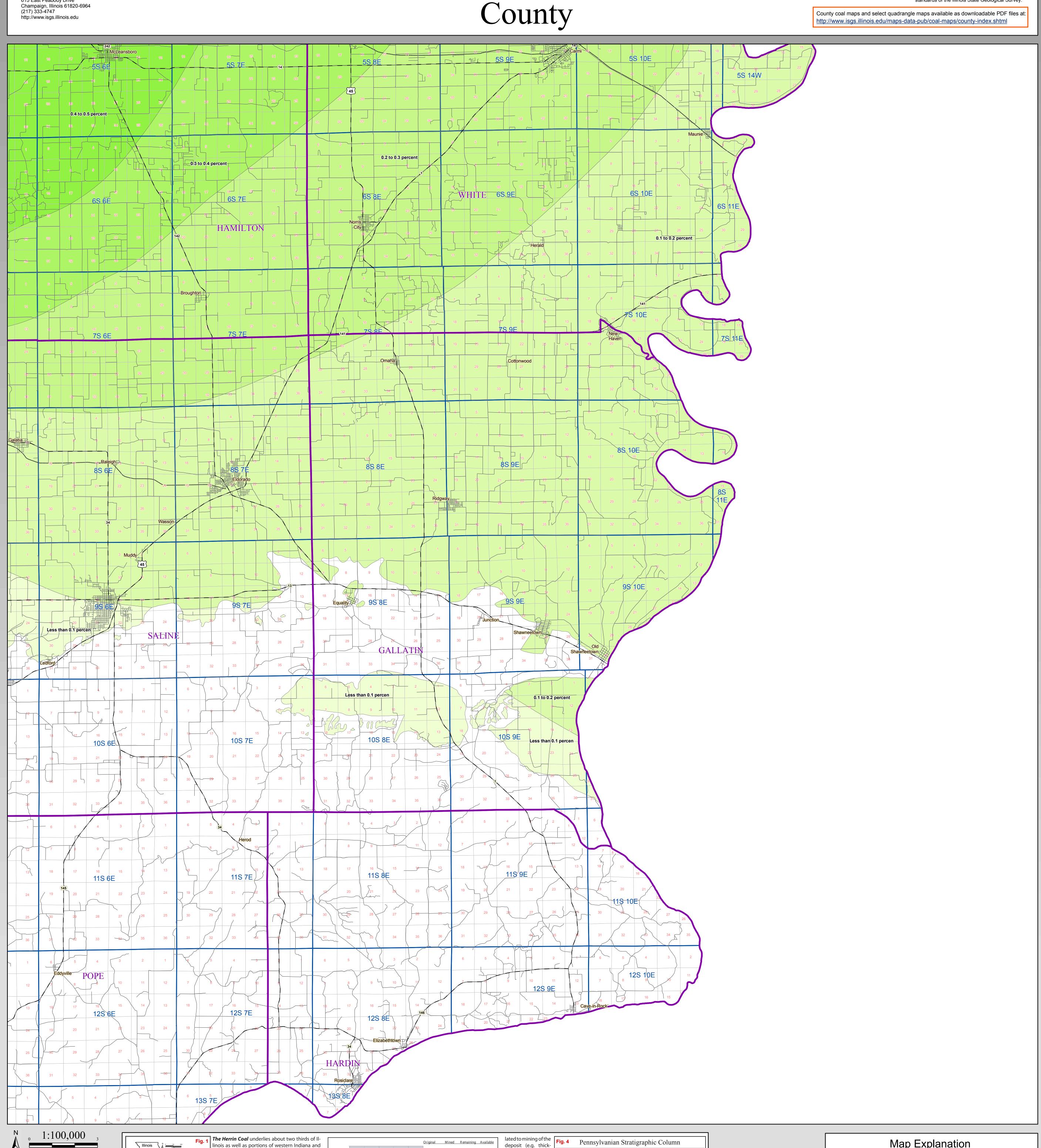
County Coal Map Series

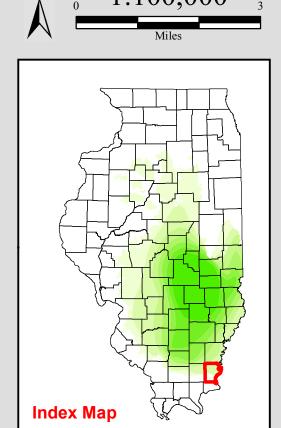
Andrew Louchios, Scott Elrick, Chris Korose, David Morse

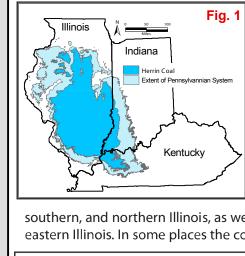
Map construction: October 29, 2009

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







linois 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 of Illinois, silty gray shale as much as 100 feet thick overlies the Herrin Coal. Associated with this shale is a channel sandstone commonly as much as a mile wide and 60-80 feet thick mapped as Anvil The original resource of Herrin Coal in the State of Illinois totals 88.5 billion References: Rock Sandstone and may be tons, of which 9.4 billion have been mined. Approximately 58% of the original orth-south cross section of the Pennsylvanian System in Illinois

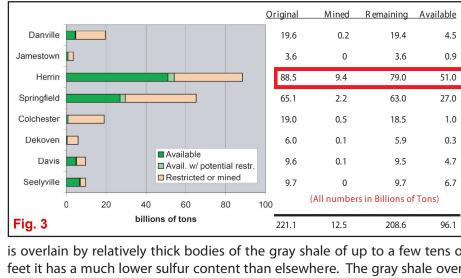


Fig. 3	dillions of tons	221.1	12.5	208.6	96.1
is overlain by	relatively thick bodies of	the gray sha	ale of up	to a few	tens of
feet it has a n	nuch lower sulfur content	than elsewh	ere. The	gray shal	le over-
lies the coal	principally in parts of Will	liamson, Fra	nklin, Jef	ferson, M	adison
St. Clair, east	ern Macoupin, and S. Verr	milion. Gene	rally, how	wever the	Herrir
Coal is overla	in by either the Anna Sha	le Member	(black fis	sile shale)	or the
Brereton Lime	estone Member. (Hopkins,	1968 - B95,	See Fig 4	.)	

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.

ness, depth, in-place

tonnage, stability

of bedrock overbur-

den) are comparable

to other coals cur-

nower portion contains a promi	Colchester 19.0 0.5 18.5	Conant Limestone Lawson Shale Conant Limestone	Less than 0.1 %	
parting (the "blue band") that nor-		rently being mined S Jamestown Coal Jamestown Coal Brereton Limestone Brereton Lime	2030 thair 0.1 70	
nes thick. It averages more than 6	Dekoven 6.0 0.1 5.9	3 in the state. Of these Anna Shale Anna Shale Anna Shale	0.44, 0.00	
tensive areas and locally reaches	Davis Available 9.6 0.1 9.5	7 resources, 21 billion Energy Shale Herrin Coal Spring Lake Coal Red Spring Lake Coal Red Spring Lake Coal Red	0.1 to 0.2 %	
in much of central Illinois but has	Seelyville Restricted or mined 9.7 0 9.7			
y mined in western, west-central,	(All numbers in Billions of Tons)	42 to 66 inches thick	0.2 to 0.3 %	
ern part of the Danville region of	billions of tons	and 30 billion tons		
hannels filled with the Anvil Rock	Fig. 3 221.1 12.5 208.6 96	Occur in thicknesses Dykersburg Shale	0.3 to 0.4 %	
Sandstone Member. In parts	is overlain by relatively thick bodies of the gray shale of up to a few tens			
of Illinois, silty gray shale as	feet it has a much lower sulfur content than elsewhere. The gray shale ov	er es. (Modified from Excello Shale Excello Shale Excello Shale	0.4 to 0.5 %	
much as 100 feet thick over-	lies the coal principally in parts of Williamson, Franklin, Jefferson, Madis	Roodhouse Coal Breezy Hill Limestone Rorfor Creek Coal Rock Coal	5.1 to 5.5 %	
lies the Herrin Coal. Associ-	St. Clair, eastern Macoupin, and S. Vermilion. Generally, however the Hel	rin Treworgy, et al) Pleasantview Sandstone	0.545.0.6.0%	
ated with this shale is a chan-	Coal is overlain by either the Anna Shale Member (black fissile shale) or		0.5 to 0.6 %	
nel sandstone commonly as	Brereton Limestone Member. (Hopkins, 1968 - B95, See Fig 4.)			
much as a mile wide and 60-			Greater than 0.6 %	
80 feet thick mapped as Anvil	The original resource of Herrin Coal in the State of Illinois totals 88.5 bill	on References:		
Rock Sandstone and may be	tons, of which 9.4 billion have been mined. Approximately 58% of the original control of the con	- Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p.		
contemporaneous with the	Herrin Coal resources, 51 billion tons, are considered available for mining. (1	
	g. (

Coal Chlorine

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

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

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