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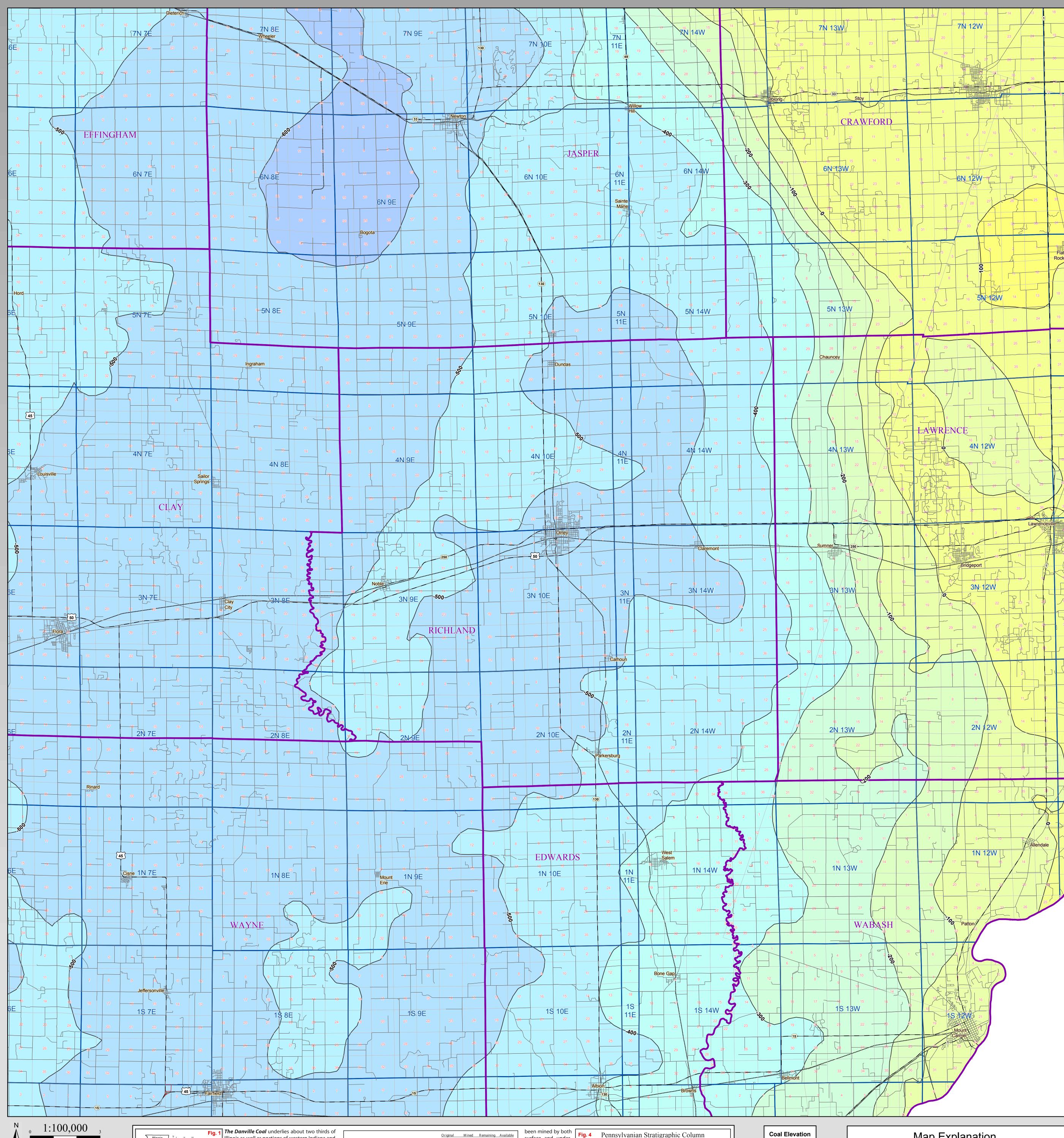
## Danville Coal Elevation RICHLAND County

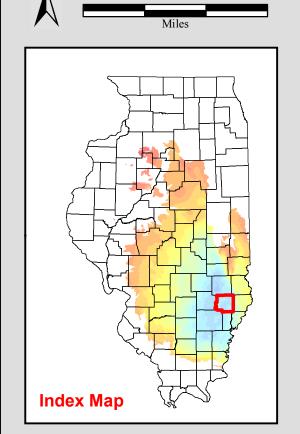
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

Map construction: November 03, 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





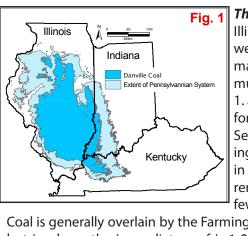


Fig. 1 The Danville Coal underlies about two thirds of Illinois as well as portions of western Indiana and western Kentucky. The coal crops out along the margins of the Illinois Basin and reaches a maximum depth in Illinois of about 1,200 feet. (See Fig 1. and Fig 2.) The Danville Coal is in the Shelburn formation which is part of the Desmoninesian Series. The Danville Coal has been mined in Livingston, McLean, La Salle, and Marshall Counties in addition to Vermilion County. In most of the remainder of the state it is a thin coal, generally a few inches to less than 3 feet thick. The Danville

Coal is generally overlain by the Farmington Shale Member of the Shelburn Formation, but in places the immediate roof is 1-2 feet of black fissile shale. It is underlain by a relatively thick underclay. At mi kins, 1968 - B95). (See Fig 4.) The original resource of Dan-

Danville							19.6	0.2	19.4	4.5	
Jamestown						1	3.6	0	3.6	0.9	
Herrin							88.5	9.4	79.0	51.0	
Springfield							65.1	2.2	63.0	27.0	
Colchester		]					19.0	0.5	18.5	1.0	
Dekoven							6.0	0.1	5.9	0.3	
Davis			■ Avail ■ Avail	able . w/ potenti	ial restr.		9.6	0.1	9.5	4.7	
Seelyville				ricted or mi			9.7	0	9.7	6.7	
	0	20 4	10 6	0 8	0	100		(All numb	ers in Billions	of Tons)	
Fig. 3		bil	llions of to	ons		2	221.1	12.5	208.6	96.1	
nined. Approximately 23% of the original Danville Coal resources, 4.5 billio											

the type locality in Vermillion tons, are considered available for mining. (See Fig 3.) Available means that to be too thin or county, the Danville Coal is 6 the surface land-use and geologic conditions related to mining of the deposit poor in quality to feet thick and occurs 20 feet (e.g. thickness, depth, in-place tonnage, stability of bedrock overburden) are tify recovery and above the Herrin Coal. (Hop-comparable to other coals currently being mined in the state. Of these resources, 4 billion tons occur in coal 42 to 66 inches thick and 0.4 billion tons occur in thicknesses greater than 66 inches.

ville Coal in the State of Illi- The Danville Coal has been mined in Illinois for over 100 years, but only about nois totals 19.6 billion tons, 1% of the original resource has been depleted. The most extensive area of ity of the Danville, Jamestown, Dekoven, Davis, and Seelyville Coals for mining in Selected Areas of which 0.2 billion have been mining was in east-central Illinois near the city of Danville where the coal has of Illinois: Illinois State Geological Survey Illinois Minerals 124, 44 p.

been mined by both surface and under-		g.	4 Penn	Pennsylvanian Stratigraphic Column							
ground methods.	eries	Fm.	Graphic			Northern and Western					
Except for mines in	Sel	Ŧ	Column		Members and Beds	Members and Beds	Members and Beds				
•	ll			Tri	voli Sandstone	Trivoli Sandstone	Trivoli Sandstone				
east-central Illinois,					Scottville Limestone     Athensville Coal (SW)	Exline Limestone					
most large surface			XXX XXX		— Athensyme Coar (5 w)						
mines recover the	es		****		ke Creek Coal	Lonsdale Limestone	West Franklin Limestone				
Danville Coal only as	Series		XXXX XXXXXX	Giı	nd Creek Coal mlet Sandstone	Gimlet Sandstone					
part of their opera-		II	××××× ×××	Ro I	ock Branch (SW)/ DeGraff (S) Coal						
tion to remove over-	Desmoinesian	elburn		Pia	isa Limestone	Farmington Shale					
	noi	She			— Danville Coal — Galum Limestone	Danville Coal	Danville Coal				
burden to mine the	lesr		×××××××××××××××××××××××××××××××××××××××	_	— Allenby Coal						
underlying Herrin				Ba	nkston Fork Limestone		Bankston Fork Limestone				
Coal. In many cases,			XXXX	An	vil Rock Sandstone	Copperas Creek Sandstone Lawson Shale	Anvil Rock Sandstone				
the Danville seam					Conant Limestone	Davison Share	Conant Limestone Jamestown Coal				
has been considered					Brereton Limestone	Brereton Limestone Anna Shale	Brereton Limestone Anna Shale				
		ale		_	Anna Shale Energy Shale	Anna Snaie	Anna Snaie				
to be too thin or too		puo	**************************************		Herrin Coal	Herrin Coal Spring Lake Coal Bed	Herrin Coal				
poor in quality to jus-		Carbondale				Big Creek Sandstone Vermillionville Sandstone					
tify recovery and was	Ш	C	XXXXXXX	Bri	iar Hill Coal		Briar Hill Coal				
simply discarded in											
the spoil pile with oth	er r	a ck	overburde	n	(Modified from I	ISGS Pub IM 124	Korose et al)				

the spoil pile with other rock overburden. (Modified from ISGS Pub. IM 124, Korose, et al) - Handbook of Illinois Stratigraphy, 1975, Illinois State Geological Survey Bulletin 95, 261p. - Christopher P. Korose, Colin G. Treworgy, Russell J. Jacobson, and Scott D. Elrick, 2002, Availabil-

600 to 700 ft 500 to 600 ft 400 to 500 ft 300 to 400 ft 200 to 300 ft 100 to 200 ft 0 to 100 ft -100 to 0 ft -200 to -100 ft -300 to -200 ft -400 to -300 ft -500 to -400 ft -600 to -500 ft -700 to -600 ft -800 to -700 ft

-900 to -800 ft

< -900 ft

800 to 900 ft

700 to 800 ft

## **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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