ILLINOIS AT URBANA-CHAMPAIGN Institute of Natural Resource Sustainability William W. Shilts, Executive Director ILLINOIS STATE GEOLOGICAL SURVEY E. Donald McKay III, Interim Director For more information contact: Institute of Natural Resource Sustainablity

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

(217) 333-4747

http://www.isgs.illinois.edu

Springfield Coal Depth FAYETTE County

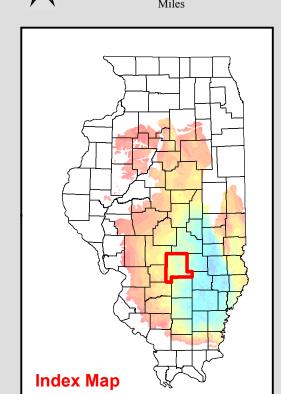
County Coal Map Series Andrew Louchios, Scott Elrick, Chris Korose, David Morse

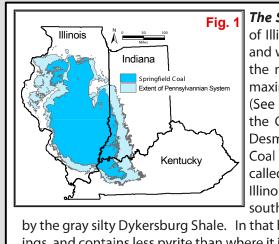
Map construction: October 26, 2009

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

10N 5E 10N 4E 10N 3E 10N 2W 10N 1W 10N 2E Oconee SHELBX MONTGOMERY 9N 4E 9N 2W 9N 1E EFFINGHAM-Coffeen 7N 1W 7N 2E BOND 6N 4E 6N 3E Saint Mulberry 35 Grove 5N 2W 5N 2E [∸]Pleasant 3N 5E 3N 2W **The Springfield Coal** underlies about two thirds the Illinois River. The Coal Depth **Map Explanation** Pennsylvanian Stratigraphic Column Original Mined Remaining Available of Illinois as well as portions of western Indiana coal is thin or absent in the southwestern





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 1. and Fig 2.) The Springfield Coal is in the Carbondale formation which is part of the Desmoninesian Series. (See Fig. 4) The Springfield Coal is normally overlain by a black fissile shale called the Turner Mine shale, but in southeastern Illinois, in a belt several miles wide that trends southwestward, the coal is thick and is overlain by the gray silty Dykersburg Shale. In that belt the coal is commonly split by shale part-

ings, and contains less pyrite than where it is overlain by the black fissile shale (Hopkins, orth-south cross section of the Pennsylvanian System in Illinois

1968 - B95). (See Fig 4.)

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 overtons, of which 2.2 billion have are considered available for along the Galatia Channel. Recent and historical mining of the coal has been

Avail. w/ potential restr ■ Restricted or mined 60 80 12.5

The original resource of burden) are comparable to other coals currently being mined in the state. Of Springfield Coal in the State these resources, 23 billion tons occur in coal 42 to 66 inches thick and 4 billion of Illinois totals 65.1 billion tons occur in thicknesses greater than 66 inches thick. been mined. Approximately \mathbf{T} he Springfield Coal has been mined in Illinois for well over 100 years. The 41% of the original Springfield thickest resources of Springfield Coal in Illinois are found in the central part of References:

Central and Southern Northern and Western Eastern and Southern Members and Beds Members and Beds Members and Beds and extreme northern portions of the coal field. (Modified from ISGS Pub. IM Canton Shale St. David Limestone Turner Mine Shale 118, Treworgy, et al) St. David Limestone Turner Mine Shale Excello Shale
Houchin Creek Coal
Breezy Hill Limestone
Kerton Creek Coal
Pleasantview Sandstone Excello Shale Houchin Creek Coa Lowell Coal

Coal resources, 27 billion tons, the state around the city of Springfield and in the southeastern part of the state - 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 Springfield mining (See Fig 3.). Available concentrated in these areas and in shallow surface minable deposits west of Coal for mining in Illinois: Illinois State Geological Survey Illinois Minerals 118, 43 p.

Detailed So. Illinois Faults < 100 ft 100 to 200 ft 200 to 300 ft 300 to 400 ft 400 to 500 ft 500 to 600 ft

700 to 800 ft

800 to 900 ft

900 to 1000 ft

1000 to 1100 ft

1100 to 1200 ft

1200 to 1300 ft

1300 to 1400 ft

1400 to 1500 ft

1500 to 1600 ft

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 600 to 700 ft conceptual model of the geology of the area on which to base further work.

Disclaimer

These data are not intended for use in site-specific screening or decision-making.

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.