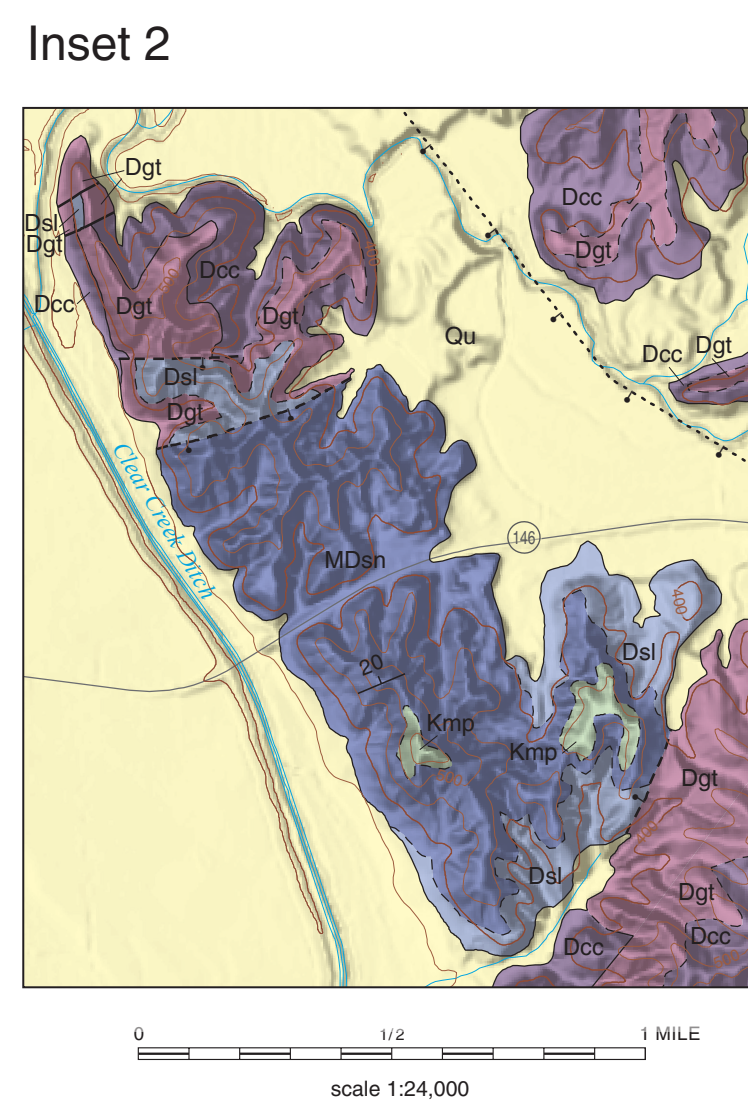
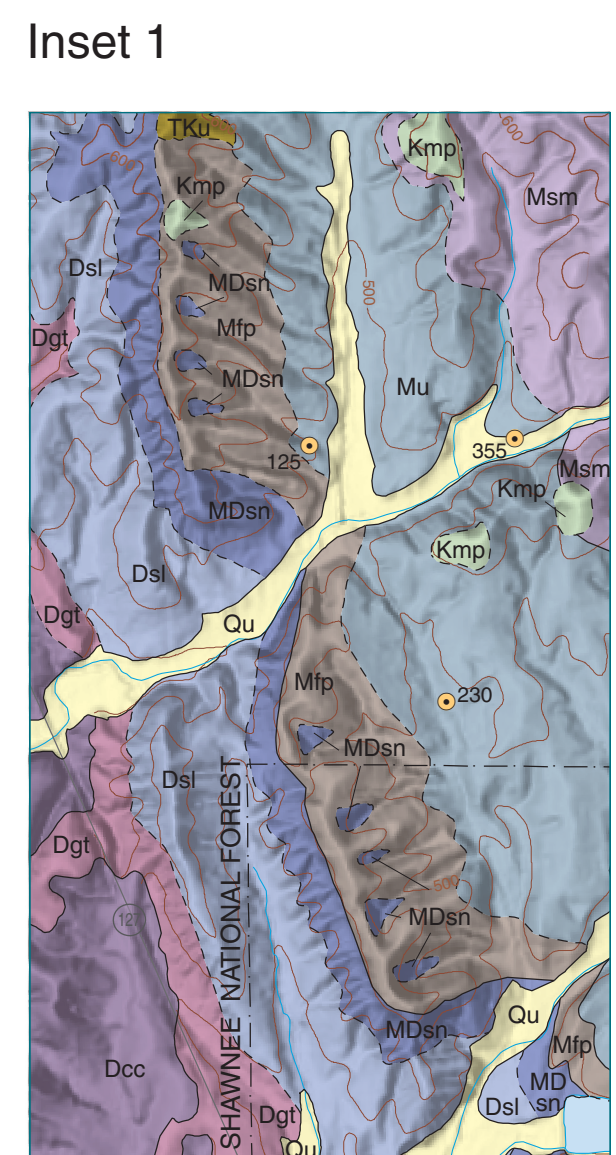
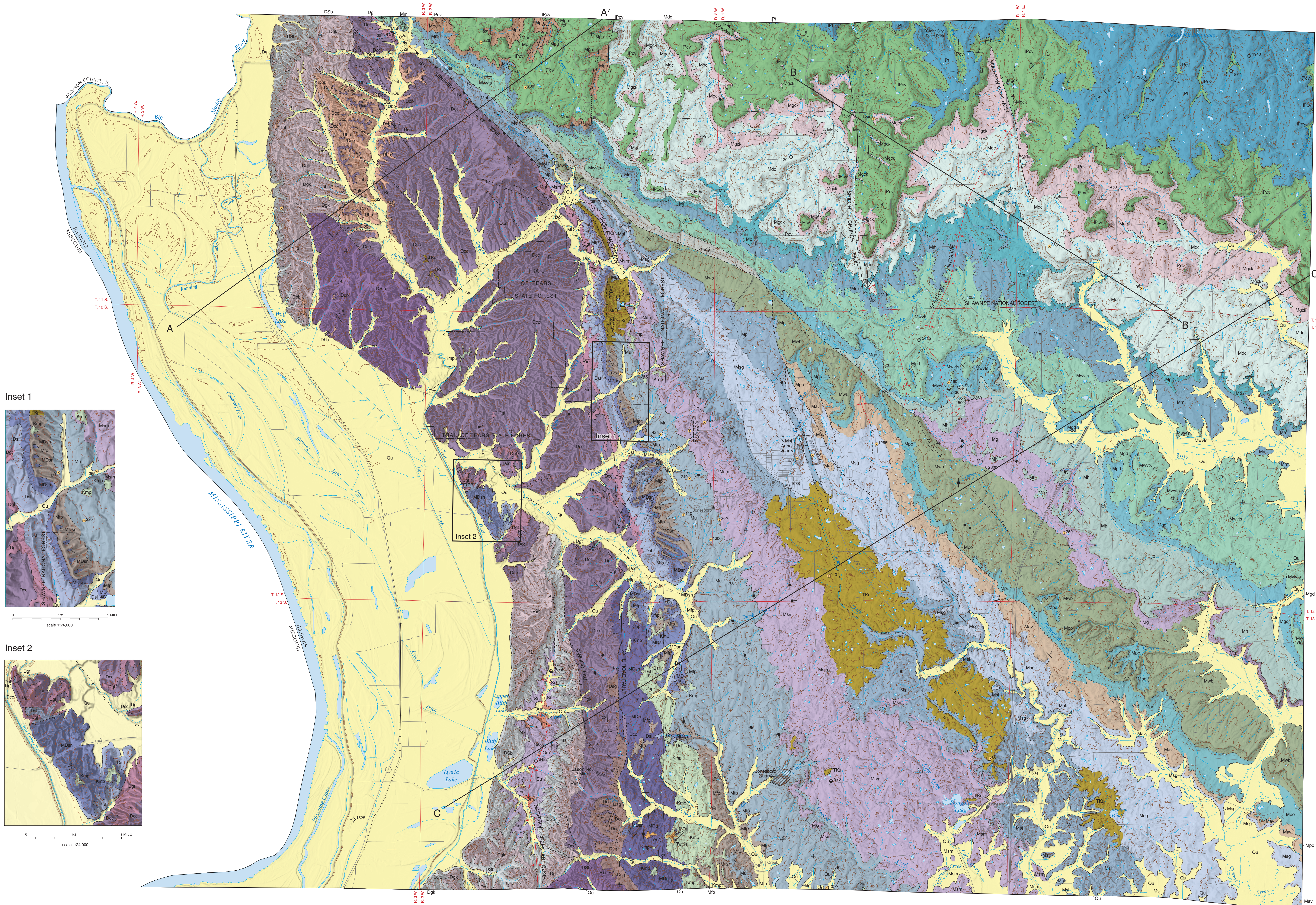


BEDROCK GEOLOGY OF UNION COUNTY, ILLINOIS

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2021

STATEMAP Union County-BG



SYSTEM	EXPLANATION	SERIES
Quaternary	Quaternary, undifferentiated; primarily alluvium	Holocene and Pleistocene
Tertiary	Tertiary and Cretaceous, undifferentiated	Eocene
Cretaceous	Wilcox Formation	Maestrichtian and Campanian
	McNairy and Post Creek Formations	
Permian	Tridewater Formation	Atokan and Desmoinesian
	Caseville Formation	Monkian
Carboniferous	Upper Pope Group, undivided, in complexly faulted area	
	Grove Church Shale and Kinkaid Limestone, undifferentiated	
	Degonia and Clore Formations	
	Paletine Limestone	
	Menard Limestone	
	Watersburg Formation, Vienna Limestone, Tar Springs Formations, undivided	
Mississippian	Lower Pope Group	
	Okaw Subgroup	
	Glen Dean Limestone	
	Hardinsburg Sandstone	
	Goldsboro Formation	
	West Baden Sandstone (comprising Cyprian, Roubidoux, and Bethel formations)	
	Paoli Limestone	
	Aux Vases Sandstone	
	St. Genevieve Limestone	
	St. Louis Limestone	
	Salem Limestone	
	Ulin Limestone	
	Fort Payne Limestone	
Devonian	Springville Shale, Chouteau Limestone, New Albany Shale, undivided	Upper Devonian-Kinrossian-Vermilion
	Mississippian and Devonian, undivided	
	St. Laurent Formation	
	St. Laurent and Grand Tower Formation, undivided	
	Grand Tower Limestone	
	Tamara Group, undivided	
	Clear Creek Formation	
	Backbone Limestone	
	Grassy Knob Chart	
	Bailey Limestone	
Silurian	Silurian undivided	Wenlock-Pridoli
Ordovician	Maquoketa Formation	Cincinnatian

Line Symbols
solid where accurately located, dashed where inferred, dotted where concealed

- Contact, accurately located
- Contact, inferred
- Fault, direction of throw unknown
- Fault, concealed
- Normal fault; ball and bar on downthrown side
- High angle reverse fault, rectangles on upthrown side
- Strike-slip fault, right-lateral
- Syncline
- Anticline
- Line of cross section

- Symbols
- Horizontal bedding
 - Strike and dip of bedding, number indicates degrees of dip
 - Joints
 - Pit or quarry
 - Pit, quarry, or prospect abandoned
 - Drift mine
 - Drift mine, abandoned
 - Surface mined area
- Drill Holes
labels indicate total depth of boring in feet
- Dry oil test hole
 - Dry hole; show of oil
 - Stratigraphic boring to bedrock

Base map compiled by Illinois State Geological Survey from digital data (2020 TIGER/Line Shapefiles) provided by the United States Census Bureau. Shaded relief and contours derived from 2012 low elevation data in the Union County collection made available by the Illinois Height Modernization Program (IHMP). Administrative boundaries provided by the U.S. Forest Service Enterprise Map Services Program (December 2020, 1:24,000, <https://data.isgs.uiowa.edu/geodata/shapefiles/shapefiles/countyboundaries>). Transverse Mercator Projection, North American Datum of 1983.

Geology based on data compilation by J. Devera, C. Hoffman, J. Nelson, C. Swiger, and E. P. Pardo, 2021.

Digital cartography by J. Carrell, C. Hoffman, and E. Bursse, Illinois State Geological Survey.

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This map has not undergone the formal Illinois Geologic Quadrangle map review process. Whether or when this map will be formally reviewed and published depends on the resources and priorities of the ISGS.

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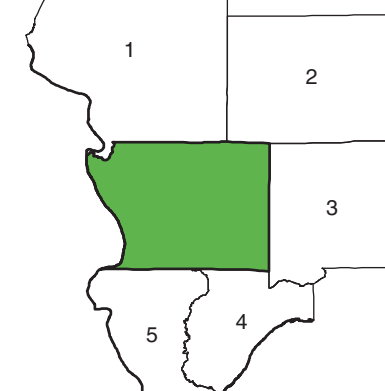
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SCALE 1:48,000
BASE MAP CONTOUR INTERVAL, 50 FEET AND 100 FEET
INDEX CONTOUR INTERVAL, 200 FEET
NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1985

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ROAD CLASSIFICATION

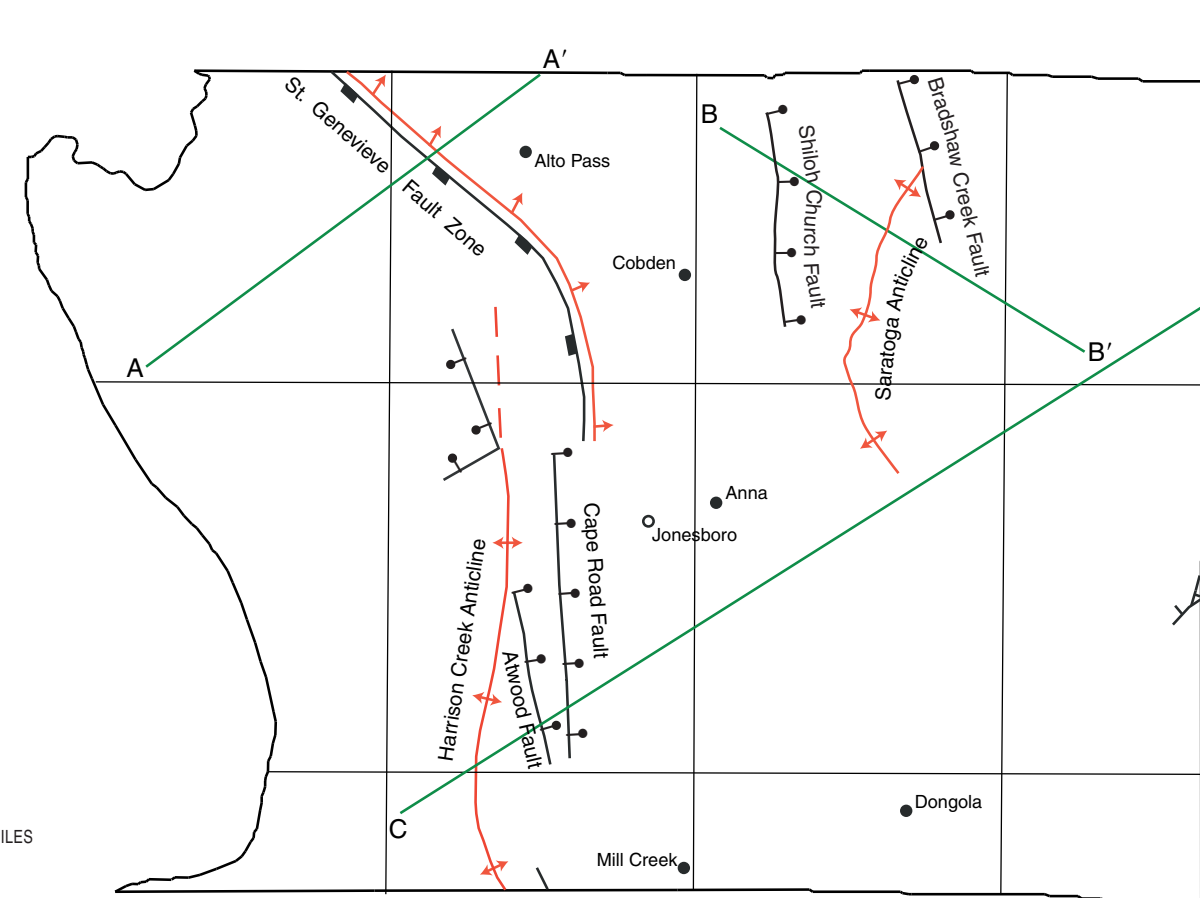
- Interstate Route
- State Route
- U.S. Route
- Local road



APPROXIMATE MEAN DECLINATION, 2021

Wolf Lake J. A. Devera 1993	Cobden J. A. Devera 1996	Makanda R. J. Jacobson and C. F. Hoffman 1993	Lick Creek C. F. Hoffman and J. A. Devera 1993
Ware W. J. Nelson and J. A. Devera 1994	Jonesboro W. J. Nelson and J. A. Devera 1994	Anna J. A. Devera 1995	Mt. Pleasant W. J. Nelson and J. A. Devera 2007
McClure J. A. Devera, W. J. Nelson, and J. A. Devera 1994	Mill Creek J. A. Devera, W. J. Nelson, and J. A. Devera 1994	Dongola W. J. Nelson, L. R. Fulkner, and J. A. Devera 1995	Cypress J. A. Devera and J. A. Devera 2005

M1 Quadrangle maps published in Union County



M2 Faults and folds in Union County

