STRUCTURAL FEATURES IN ILLINOIS - A COMPREHENDIUM

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Janis D. Treworgy

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PLATE 1
Structural features in Illinois back pocket
STRUCTURAL FEATURES IN ILLINOIS - A COMPLENDIUM

INTRODUCTION

The following three lists of structural names and the accompanying map (pl. 1) constitute a compendium of nearly all of the structural features in Illinois that have been formally named in the literature. Much of the mapping in the past has been initiated by the search for oil and gas, coal, fluorspar, lead and zinc, and other mineral resources. This map reflects trends in mineral exploitation and, consequently, indicates areas where detailed geologic studies have been made.

Structural delineations on the map have been taken directly from the literature; therefore, the mapping horizon may differ from one structure to another. Although many of the structural features are shown to terminate at the state line on this map, most of them are known or suspected to continue into the adjacent states. There has been no attempt in this compilation to remap any structures on the basis of new data or new interpretations.

Formally named structures

The first list consists of formally named structures. They are listed alphabetically and are followed by their locations (in parentheses), and references to original and major works on the structures. A few of these structures are not delineated on the map because they have not been substantiated by more recent mapping; an asterisk appears in front of their names. An asterisk also appears in front of names that have been replaced by newer names (the new names appear in parentheses after the former names). These structures with two names are listed twice—by the old and new names.

The structures of the Fluorspar Area Fault Complex have been treated differently because of their complexity. As many faults as possible from this area have been delineated on the map, and all of the formal structural names within the complex are listed. With the exception of a few major features, however, the names are not indicated on the map because of a lack of space.

Named Silurian reefs are included in this compendium although they are not tectonically generated structures.

Significant unnamed structures

Following the list of formally named structural features is a list of significant unnamed structures. This list includes two types of features. The first type (no. 1-13) consists of unnamed structural highs that are well delineated in published maps, and were selected because they were too large to be omitted. In all cases, the names given in the list refer to the oil field associated with the structure; only the identifying number appears with the delineation of the structure on the map. Many other known, but unnamed, structural features that are associated with oil fields (Van Den Berg, 1980) have been omitted.

The other type of feature (no. 14-19) consists of faults that appear on published maps, but have not been formally named. Besides these, there are still other faults that have been mapped and are documented only in unpublished field notes. Most of these are minor faults found in underground mines.

Buried Precambrian hills

The third list of structural features contains the names and locations of all of the drill holes in Illinois that have encountered buried Precambrian hills. Although these hills are paleotopographic features, they generally correspond with structural highs in the younger Paleozoic rocks.

The list of references follows at the end.
FORMALLY NAMED STRUCTURES

Structural names are followed by their locations (in parentheses) and references to original and major works on the structures.

* An asterisk means one of two things: the structure is not delineated on the map, or the structure’s name has been replaced by the new name that appears in parentheses after it. In the latter case, references are listed after the new name.

Abingdon Dome (D-3): Poor, 1927.

* Albion Fault (see Albion-Ridgway Fault).

Albion-Ridgway Fault (I-7, J-7), formerly named Ridge-way-Omaha Monocline or Fault Zone (Cady et al., 1939): Bristol, 1975; Bristol and Treworgy, 1979; Harrison, 1951; Pullen, 1951; Smith and Cady, 1951.


Ancona Dome (C-6): Buschbach and Bond, 1974.

Anderson Anticline (G-4): Ball, 1952; Easton, 1942.


Ashmore Dome (F-7, F-8, G-7, G-8): Buschbach and Bond, 1974; Clegg, 1965b; Meents, 1965.

Ashton Arch (B-5, B-6): Green, 1957; Kolata et al., 1978a and 1978b; Templeton and Willman, 1952; Willman and Templeton, 1951.


Atwood Fault (K-5): Heyl et al., 1965; Weller, J. M., 1940.

* Aurora Syncline: Cady, 1920; Willman and Payne, 1942.

* Ava-Campbell Hill Anticline (see Campbell Hill Anticline).

Aviston Anticline (H-4): Bell, 1941.

Ayers Anticline (H-5): Blatchley, 1914; Bell, 1926c; Bell, 1928; Bell, 1941; Kay, 1915.

Babylon Anticline (D-3): Moulton, 1925.

Baldwin, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.


Bartelso, Silurian reef (H-5): Bell, 1941; Bristol, 1974; Cahill et al., 1978; Carlton, 1940; Kay, 1915; Shaw, 1912; Shaw, 1923.

Bartelso East, Silurian reef (I-5): Bristol, 1974; Cahill et al., 1978.

Beckemeyer Dome (H-5): Bell, 1941.

* Bellair-Champaign Uplift: Clegg, 1959; Mylius, 1923; Mylius, 1927.

* Bellair Dome: Mylius, 1927.

Belleville Anticline (H-4, I-4): Bell, 1941.

Beltrees-Melville Anticline (H-3): Collingwood, 1933.


Blackoak Dome (H-8): Easton, 1943.

Blairsville Dome (I-7): Rolley, 1951.


Bonpas Anticline (H-8): Easton, 1943.


* Bourbon Anticline: Clegg, 1959; Clegg, 1965b.


Brereton Anticline (D-3, D-4): Wanless, 1957.

Brocton Dome (F-8), formerly named Oakland Dome (Clegg, 1959; Mylius, 1923): Buschbach and Bond, 1974; Clegg, 1965b.

*Chesterville Anticline: Clegg, 1959; Clegg, 1965b.

Chicago Heights, Silurian reef (B-8): Bretz, 1939; Bretz, 1943; Willman, 1943.

Clay City Anticlinal Belt (H-7, I-7), includes what was formerly named Noble Anticline: Bell, 1943; Du Bois and Siever, 1955; Lowenstam, 1951; Siever and Cady, 1951.

*Clifford Anticline: Cady, 1916.


Conant Dome (I-5): Cady et al., 1940.

Cooks Mills Anticline (F-7): Clegg, 1959; Clegg, 1965b.


Cottage Grove Fault System (J-5, J-6, J-7): Bell and Leighton, 1949; Cady, 1919a; Cady et al., 1938; Cady et al., 1939; Clark and Royds, 1948; Henbest, 1929; Heyl and Brock, 1961; Heyl et al., 1965; Heyl, 1972; Nelson and Krausse, in preparation.


Coulterville North, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.

Court Creek Dome (D-3): Poor, 1927.

Crescent City Dome (D-8): Bell, 1961; Buschbach and Bond, 1974.

Dahlgren Anticline (I-6): Rolley, 1951.


Dale Dome (I-7, J-7): Cady et al., 1939; Rolley, 1951.
Darmstadt, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.

*Darmstadt Anticline: Bell, 1929a; Cady et al., 1940; Shaw, 1912; Shaw, 1921; Weller, J. M., and Bell, 1937.

Davis Syncline (Fluorspar Area Fault Complex): Brecke, 1962.

*Dayton Syncline; Willman and Payne, 1942.


Depue Anticline (C-5): Willman and Payne, 1942.


Donnellson Anticline (G-5): Bell, 1941.


Drake-White Hall Anticline (F-3, G-3): Collingwood, 1933.

Dudley Dome (F-8): Clegg, 1965b.

*Dupo Anticline (see Waterloo-Dupo Anticline).

*Du Quoin Monocline (H-5, I-5, J-5): Bell, 1943; Bement, 1929; Brownfield, 1954; Cady et al., 1938; Clark and Royds, 1948; Cohee and Carter, 1939; Desborough, 1961a; Fisher, 1925; Keys and Nelson, 1980; McGinnis and Heigold, 1961; Moulton and Bell, 1929; Nelson and Krausse, in preparation.

Dwight Anticline (C-6, C-7, D-7): Willman and Payne, 1942.

Eagle Valley Syncline (J-7) (Fluorspar Area Fault Complex): Baxter et al., 1967; Butts, 1917; Butts, 1925; Cady, 1952; Heyl et al., 1965; McGinnis and Bradbury, 1964; Smith, 1957; Weller, S., et al., 1920.

Earlville Sag (B-5, B-6): Willman and Payne, 1942.

*East Loudon Anticline: Newton, 1941.

Elbridge, Silurian reef (F-8): Bristol, 1974; Buschbach and Bond, 1974; Clegg, 1965b.

Elmwood Syncline (D-3, D-4): Wanless, 1957.


Fairfield Basin (inset map): Allgaier and Hopkins, 1975; Bell et al., 1964.


*Fairview-Rosiclare Fault (see Rosiclare Fault): Hubbert, 1944.

Fairview Syncline (D-3, D-4): Wanless, 1957.

Fancher-Mode Anticline (G-6): Newton, 1941.


Fishhook Anticline (F-2): Howard, 1961; Meents, 1958; Treworgy, 1979c.

Flora Dome (H-7): Bristol and Howard, 1976; Lowenstam, 1951.


Fosterburg-Staunton Anticline (H-3, H-4): Bell, 1941.

Frogtown North, Silurian reef (H-5): Bristol, 1974; Cahill et al., 1978.


Garfield Dome (C-6): Buschbach and Bond, 1974.

Germantown East, Silurian reef (H-4, H-5): Bristol, 1974; Cahill et al., 1978.


Germantown East, Silurian reef (H-4, H-5): Bristol, 1974; Cahill et al., 1978.


Glasford Disturbance (D-4): Buschbach and Bond, 1974; Buschbach and Ryan, 1963.

Glenridge Anticline (H-5): Bell, 1926c; Bell, 1927.


*Good Hope Fault (see Extension Fault).


Grandview Dome (F-8): Clegg, 1965b.

Granville Basin (C-5): Willman and Payne, 1942.


Greenridge Syncline (G-4): Ball, 1952.

Greenville Dome (H-5), part of structure that was formerly named Pocahontas Anticline and then Stubblefield Anticline (see these names for references): Bell, 1941.


Grimes Anticline (G-3, G-4): Easton, 1942.

Grindstaff Fault (Fluorspar Area Fault Complex): Butts, 1925; Smith, 1957.


*Harrisburg Fault (now part of Cottage Grove Fault System): Cady, 1919a.


Haw Creek Dome (D-3): Poor, 1927.

Hayes Dome (F-7): Bristol and Buschbach, 1973; Bristol and Prescott, 1968.

Hennepin Syncline (C-5): Willman and Payne, 1942.

Herald-Phillipstown Fault (I-7, I-8, J-7): Bristol, 1975; Bristol and Treworgy, 1979; Harrison, 1951; Pullen, 1951.


Herscher Dome (C-7): Bell, 1961, Buschbach, 1964; Buschbach and Bond, 1974; Willman and Templeton, 1951.

Hickory Grove Anticline (G-4): Easton, 1942.


Hillsboro Dome (G-5): Buschbach and Bond, 1974.

Hoffman Anticline (H-5): Bell, 1926b; Kay, 1915; St. Clair, 1917b; Shaw, 1912.


Holland Anticline (G-6): Newton, 1941.


Hudson Dome (D-5, D-6): Buschbach and Bond, 1974; Clegg, 1972.

Hume Dome (F-8): Buschbach and Bond, 1974.

Illinois Basin (inset map): Atherton, 1971; Bell et al., 1964; Bristol, 1966b; Bristol and Buschbach, 1971; Bristol and Buschbach, 1973; Bristol and Howard, 1976; Buschbach and Atherton, 1979; Clark and Royds, 1948; Eardley, 1962; King, 1951; Krausse and Treworgy, 1979; Lockett, 1947; Potter and Pettijohn, 1963; Stevenson and Whiting, 1967; Swann and Bell, 1958; Wanless, 1955; Weller, J. M., 1936; Weller, J. M., and Bell, 1937.


Ina Dome (I-6): Cady et al., 1938.

Inman East Fault (J-7): Bristol, 1975; Bristol and Treworgy, 1979; Pullen, 1951.


*Irishtown Anticline: Bell, 1941; Blatchley, 1914; Kay, 1915; Shaw, 1912.

*Iuka Anticline: Easton, 1944.

Jamestown Anticline (I-4): Bell et al., 1931.

Junction City Dome (H-5): Bell, 1926b; Brownfield, 1954; St. Clair, 1917b; Shaw, 1923.


Kane Anticline: (G-3): Collingwood, 1933.

Kankakee Arch (inset map): Bell et al., 1964; Buschbach, 1964; Ekblaw, 1938; Green, 1957; Kolata et al., 1978a and 1978b; Pirtle, 1932; Willman and Payne, 1942; Willman and Payne, 1943; Willman and Templeton, 1951.

Kempton Syncline (C-7, D-7): Willman and Payne, 1942.

Kenner Dome (H-6): Easton, 1944; Lowenstam, 1951.

King Anticline (I-6): Folk and Swann, 1946.


Lake Bloomington Dome (D-6): Buschbach and Bond, 1974; Clegg, 1972.

La Salle Anticlinal Belt (inset map): Bell, 1943; Bell et al., 1964; Blatchley, 1910; Blatchley, 1913; Bristol and Buschbach, 1973; Cady, 1912a; Cady, 1912b; Cady, 1915; Cady, 1919b; Cady, 1920; Clark and Royds, 1948; Clegg, 1959; Clegg, 1965a; Clegg, 1965b; Clegg, 1970; Cohee and Carter, 1939; Freeman, 1868; Green, 1957; Kay, 1917; McGinnis and Heigold, 1961; Mylius, 1921b; Mylius, 1927; Payne, 1939; Sauer, 1816; Swann and Bell, 1958; Thwaites, 1927; Weller, S., 1906; Willman and Payne, 1942; Worthen, 1890.


Lee Fault (Fluorspar Area Fault Complex): Baxter and

* Lenzburg Anticline: Bell, 1929a.

Levan Anticline (J-5): Root, 1928.

Lexington Dome (D-6): Buschbach and Bond, 1974; Clegg, 1972.


Lincoln Fold (H-2, H-3): Baxter, 1970; Collingwood, 1933; Collinson et al., 1954; Koenig, 1961; Krey, 1924; McQueen et al., 1941; Rubey, 1952; Searight and Searight, 1961; Treworgy, 1979a.


Lively Grove, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.

Longbranch Monocline (J-6, J-7): Cady et al., 1939.

Louden Anticline (G-6, H-6): Bristol and Buschbach, 1973; Bristol and Howard, 1976; Buschbach and Bond, 1974; Cohee and Carter, 1939; Du Bois, 1951; Newton, 1941.


Lowder Anticline (F-4): Easton, 1942.


Macoupin Dome (G-4): Easton, 1942; Lee, 1915.

Mahomet Dome (E-7): Bell, 1961; Buschbach and Bond, 1974; Heigold et al., 1964; Howard, 1964.


Marissa Dome (I-4): Bell, 1929a; Cady et al., 1940.


Marshall-Sidell Syncline (E-8, F-8, G-8), includes what was formerly named West Union Syncline (Moulton and Young, 1928): Cady, 1952; Clegg, 1965a; Clegg, 1966b; Mylius, 1927; Potter, 1956; Stevenson and Whiting, 1967.

Martinsville Dome (G-8): Bristol and Buschbach, 1973; Clegg, 1965a; Clegg, 1966b; Cohee, 1941; Moulton, 1926a; Moulton and Young, 1928; Mylius, 1927.

Mason Anticline (H-6): Newton, 1941.

Mattoon Anticline (F-7, G-7): Clegg, 1959; Clegg, 1965b.


McKinley, Silurian reef (I-4): Bandy, 1950; Bristol, 1974; Cady et al., 1940; Cahill et al., 1978.

McWade Fault (Fluorspar Area Fault Complex): Hubbert, 1944; Schwerin, 1928.

Media Anticline (D-2): Bell and Workman, 1928.


Millstadt Anticline (I-3): Bell, 1941.

Minick Anticline (B-5): Willman and Payne, 1942.


Mississippi River Arch (inset map): Bell et al., 1964; Edmund and Anderson, 1967; Howell, 1935; Wilson, 1939.

Modesto Anticline (G-4): Ball, 1952; Easton, 1942.


* Structural Features in Illinois

* Mt. Carmel Fault (see Mt. Carmel-New Harmony Fault).


Nashville, Silurian reef (I-5): Bristol, 1974; Cahill et al., 1978; Kay, 1915; Shaw, 1912; Shaw, 1921.

Nevins, Silurian reef (F-8): Bristol, 1974; Buschbach and Bond, 1974; Clegg, 1965b.

New Baden East, Silurian reef (H-4): Bristol, 1968a; Bristol, 1974; Cahill et al., 1978.


New Douglas Dome (G-4, H-4), formerly named Sorento Dome (see this name for references): Bell, 1926e; Bell, 1941.

*Noble Anticline (now part of Clay City Anticlinal Belt): Bell and Cohee, 1938; Siever and Cady, 1951.

Nilwood Anticline (G-4): Ball, 1952; Easton, 1942.

*Noble Anticline (now part of Clay City Anticlinal Belt): Bell and Cohee, 1938; Siever and Cady, 1951.

Nokomis Anticline (G-5): Moulton, 1925; Payne and Cady, 1944.


Oakdale Syncline (C-6, C-7, D-7): Willman and Payne, 1942.
Panama Anticline (G-4), formerly named Sorento Dome (see this name for references): Bell, 1926e; Bell, 1941; Lee, 1926.

Parker Dome (see Westfield Dome).

Parkersburg Dome (H-8): Easton, 1943.


Patoka, Silurian reef (H-5): Bristol, 1974; Smoot, 1958; Squires et al., 1950.

Payson Anticline (F-1): Cox, 1927.


Peru Anticline (C-5): Willman and Payne, 1942.


Pinckneyville Anticline (I-5): Bell et al., 1931; Cady et al., 1938.

Pitcher Lake Fault (J-7): Bristol, 1975; Bristol and Treworgy, 1979; Harrison, 1951.


Pittsfield Anticline (F-1, F-2): Bell, 1926d; Collingwood, 1933; Coryell, 1919; Krey, 1924; Weller, J. M., and Bell, 1937.

Plainview Syncline (G-3, G-4): Easton, 1942.


*Pocahontas Anticline (see Stubblefield Anticline): Kay, 1915.

Polo Basin (B-4): Kolata et al., 1978b; Templeton and Willman, 1952; Willman and Templeton, 1951.


Pontiac Dome (D-6): Buschbach and Bond, 1974.


Potato Hill Syncline (Fluorspar Area Fault Complex): Butts, 1917; Butts, 1926; Cady, 1926; Weller, S., et al., 1920.


Raccoon Lake, Silurian reef (H-5): Bristol, 1974; Brownfield, 1954.

Ransom Syncline (C-6, D-6): Willman and Payne, 1942.

*Rattlesnake Ferry Fault Zone (see Ste. Genevieve Fault Zone).

Raum Fault (Fluorspar Area Fault Complex): Baxter et al., 1967.

Redhead Anticline (H-8): Easton, 1943.


Reno Anticline (H-4): Bell, 1941.


*Ridgeway-Omaha Monocline or Fault Zone (see Albion-Ridgway Fault): Cady et al., 1939.

*Ridgway Fault (see Albion-Ridgway Fault).


Rock Creek Graben (J-7, K-7): Baxter and Desborough,


Rural Hill Anticline (I-6, J-6): Rolley, 1951.


St. David Anticline (D-4, E-3): Wanless, 1957.

Ste. Genevieve Fault Zone (J-4, J-5, K-5), also known as Rattlesnake Ferry Fault Zone: Bristol and Buschbach, 1973; Desborough, 1958; Desborough, 1961c; Heyl et al., 1965; McGinnis and Heigold, 1961; Weller, J. M., and Ekblaw, 1940.

St. Jacob Dome (H-4): Bell, 1961; Bristol and Buschbach, 1973; Buschbach and Bond, 1974; Lowenstam, 1948.

St. James Anticline (H-6): Newton, 1941; Stevenson, 1964.

St. Libory, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.

Salem Anticline (H-5, H-6, I-6): Arnold, 1939; Bristol and Buschbach, 1973; Brownfield, 1954; Clegg and Carter, 1939; Siever, 1950.

Saline River Fault (Fluorspar Area Fault Complex): Butts, 1925; Cady et al., 1939; Smith, 1957.

Samsville Anticline (I-7): Easton, 1943.

Sandoval, Silurian reef (H-6): Bell, 1927; Bristol, 1974; Brownfield, 1954; Hoover, 1944; Moulton and Bell, 1929; St. Clair, 1917b; Spitznagel and Moore, 1939.

Sandwich Fault Zone (B-5, B-6, B-7, C-7): Beck, 1965; Buschbach, 1964; Green, 1957; Heigold, 1972; Kolata et al., 1978a and 1978b; McGinnis and Heigold, 1961; Ostrom, 1957; Suter et al., 1959; Willman, 1971; Willman and Payne, 1942; Willman and Payne, 1943; Willman and Templeton, 1951.


*Savanna-Sabula Anticline (see Plum River Fault Zone): Cady, 1920; Carman, 1910; McGee, 1890; Savage, 1905; Templeton and Willman, 1952; Weller, J. M., 1935; Willman and Templeton, 1951.

*Schuyler Arch: Workman and Gillette, 1956.

Sciota Anticline (D-2): Buschbach and Bond, 1974; Wanless, 1957.

Seatonville Syncline (B-5, C-5): Willman and Payne, 1942.


Shanghai Dome (C-2, C-3): Buschbach and Bond, 1974.


Shaw Dome (F-7): Bristol and Prescott, 1968.

Shawneetown Fault Zone (J-6, J-7), formerly named Gold Hill Fault (Brokaw, 1916): Bristol and Treworgy, 1979; Butts, 1925; Cady, 1926; Cady et al., 1939; Clark and Royds, 1948; Clegg and Bradbury, 1956; Heyl and Brock, 1961; Heyl et al., 1965; McGinnis and Bradbury, 1964; McGinnis and Heigold, 1961; Smith, 1957; Swann and Bell, 1958; Weller, J. M., et al., 1952.


Shelbyville Anticline (G-6): Newton, 1941.


Shipman Anticline (G-4): Easton, 1942.

Shoal Creek Syncline (G-4): Lee, 1915.

Sigel Anticline (G-6, G-7): Newton, 1941.

*Siggins Dome: Clegg, 1959; Mylius, 1927.

Siloam Anticline (H-6): Bristol and Howard, 1976; Easton, 1944.

Smallpox Creek Syncline (A-3): Bradbury et al., 1956.

*Sorento Dome (see New Douglas Dome and Panama Anticline): Bell, 1926e; Bell, 1941; Blatchley, 1914; Kay, 1915.
South Johnson Dome (G-8): Myllius, 1927.

South Litchfield Dome (G-4): Easton, 1942; Lee, 1915.

Spanish Needle Creek Dome (G-4): Easton, 1942; Kay, 1916; Lee, 1915.


*Sparta Syncline: Moulton, 1926b.

Spring Valley Anticline (C-5): Willman and Payne, 1942.

Star Union Syncline (C-5): Willman and Payne, 1942.


Staunton Dome (G-4): Bell, 1941; Blatchley, 1914; Easton, 1942; Kay, 1915; Lee, 1915.

Stavanger Syncline (C-6): Willman and Payne, 1942.


*Stephenson-Ogle County Line Syncline (see Uptons Cave Syncline): Cady, 1920.

Stewardson Anticline (G-6): Newton, 1941.


Stonefort Anticline (J-6): Heyl et al., 1965; Stonehouse and Wilson, 1955; Weller, J. M., 1940.

Stony Island, Silurian reef (B-8): Bretz, 1943; Lowenstam, 1950; Lowenstam, 1957; Willman, 1943.

*Stubblefield Anticline (see Old Ripley Anticline and Greenville Dome): Blatchley, 1914; Moulton, 1925.

Sugar Creek Syncline (G-4): Ball, 1952.


Swansea Anticline (H-3, H-4): Bell, 1941.


Table Grove Syncline (E-2, E-3): Wanless, 1957.

Thayer Dome (F-4, G-4): Easton, 1942.


Tilden, Silurian reef (I-4): Bristol, 1974; Cahill et al., 1978.

Tilden North, Silurian reef (I-4): Bell, 1929a; Bell, 1961; Bristol, 1974; Buschbach and Bond, 1974; Cahill et al., 1978.

Tolu Dome (Fluorspar Area Fault Complex): Baxter et al., 1963.


Toulon Dome (C-4): Treworgy, 1979d.


Trowbridge Anticline (G-6, G-7): Newton, 1941.


Troy Grove Dome (C-5): Bell, 1961; Buschbach and Bond, 1974.

Tuscola Anticline (E-7, F-7): Bell, 1943; Bristol and Prescott, 1968; Buschbach and Bond, 1974; Clegg, 1965b.

*Tuscola Fault: Green, 1957.

Twitchell Fault (Fluorspar Area Fault Complex): Baxter et al., 1967.


*Vandalia Arch: North, 1969; Workman and Gillette, 1956.
Venedy Dome (I-4): Kay, 1915; Shaw, 1912.


*Vevay Park Dome: Mylius, 1927.


Wabash River Anticline (I-8, I-7, J-7), formerly named New Harmony Anticline: Bell, 1943; Siever, 1951; Swann, 1951.

Wabash Valley Fault System (inset map): Bristol, 1975; Bristol and Treworgy, 1973; Cady et al., 1939; Clark and Royds, 1948; Harrison, 1951; Heyl et al., 1965; Pryor, 1956; Pullen, 1951; Smith and Cady, 1951.


Walpole Anticline (J-6): Cady et al., 1939; Rolley, 1951.

Wamac Dome (H-5): Bell, 1926a; Brownfield, 1954.


Warsaw Anticline (E-1): Bell, 1932.

Waterloo-Dupo Anticline (H-3, I-3): Bell, 1929b; Bell, 1961; Bristol and Buschbach, 1973; Buschbach and Bond, 1974; Lamar, 1922; Mylius, 1921a; Weller, S., and Weller, J. M., 1939.

Waverly Anticline (F-4): Easton, 1942.

Waverly Dome (F-4): Bell, 1961; Buschbach and Bond, 1974.

Weaver, Silurian reef (G-8): Bristol, 1974; Clegg, 1965b.

Western Shelf (inset map): Bell et al., 1964.

Westfield Dome (G-7, G-8), formerly named Parker Dome: Bristol and Buschbach, 1973; Clegg, 1959; Clegg, 1965a; Clegg, 1965b; Cohee, 1941; Moulton and Young, 1928; Mylius, 1923; Mylius, 1927.

*West Union Syncline (now part of Marshall-Sidell Syncline): Moulton and Young, 1928.

West Green Fault Zone (Fluorspar Area Fault Complex): Brecke, 1962.


*White Oak Anticline: Kay, 1915; Shaw, 1912.


Winkleman Fault (J-6): Cady, 1926.

Wisconsin Arch (inset map): Bieber, 1949; Doyle, 1965; Green, 1957; Heyl et al., 1959; Kolata et al., 1978a and 1978b; Pirtle, 1932; Willman and Templeton, 1951.


*Woodlawn-Drivers Anticline: Cady et al., 1938.

Wyen Anticline (G-4): Easton, 1942.

Xenia Dome (H-6), formerly named Paine Dome: Bristol and Howard, 1976; Easton, 1944; Lowenstam, 1951; Weller, J. M., and Bell, 1936.

*York Dome: Clegg, 1959; Mylius, 1927.

*Zeigler Anticline: Cady, 1916.
SIGNIFICANT UNNAMED STRUCTURES

Numbers 1 to 19 correspond to numbered structures on the map. Names given below, following numbers 1 to 13, are informal and refer to the oil fields associated with the structures. Location designations, following numbers 14 to 19, refer to unnamed faults. Structural designations are followed by locations (in parentheses) and references to works in which the structures have been mapped.


3. Oblong structure (G-8, H-8): Blatchley, 1913; Bristol and Howard, 1976; Cady, 1920; Potter, 1956.

4. Main structure (H-8): Blatchley, 1912; Blatchley, 1913; Bristol and Howard, 1976; Cady, 1920; Potter, 1956.

5. Lawrence County structure (H-8): Blatchley, 1913; Bristol and Howard, 1976; Cady, 1920; Potter, 1956.


9. Cordes structure (I-5): Bristol and Howard, 1976; Cady et al., 1940.


15. Faults in the Pomona and Cobden Quadrangles, Jackson County (J-5): Desborough, 1958; Desborough, 1961b.


17. Faults in Johnson County (K-6): Heyl et al., 1965; Weller, J. M., 1940.


BURIED PRECAMBRIAN HILLS

Letters a to g correspond to lettered structures on the map. Letters are followed by well names associated with the structures, locations (in parentheses), and references, if they exist, to works on the structures.

a. Panhandle-Eastern 1 Mumford, 21-5S-4W, Pike County (F-2): Bell et al., 1964; Bond, 1971; Workman and Bell, 1948.

b. Mississippi River Transmission Corp. S-5 Huldah Baer, 27-3N-6W, Madison County (H-4).

c. C. E. Brehm Drilling and Producing 1 Hemminghaus, 33-3N-1W, Clinton County (H-5).


e. C. E. Brehm Drilling and Producing 1 Bochantin Comm., 35-3S-2W, Washington County (I-5).

f. Richard W. Beeson 1 Joseph Poiter Unit, 28-5S-3W, Perry County (I-5).

g. Texaco 1 E. Cuppy, 6-6S-7E, Hamilton County (I-7): Bond, 1971.
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