

FIG. 1. Site locations of the 249 photographic features indexed.

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# An Airphoto Index To Physical and Cultural Features in Eastern United States

Photo interpreters should find that this index provides typical examples.

(Abstract on page 898)

## INTRODUCTION

THIS IS AN INDEX to Agricultural Stabilization and Conservation Service<sup>1</sup> photographs and corresponding U. S. Geological Survey<sup>2</sup> maps of 249 selected features in Eastern United States. Features were chosen to provide representative illustrations of

physiography, current land use, cultural patterns, and vegetation within the 30-state area served by the U. S. Department of Agriculture's<sup>3</sup> Eastern Aerial Photography Laboratory at Asheville, North Carolina. All

<sup>1, 2, 3</sup> Hereinafter referred to as ASCS, USGS, and USDA, respectively.

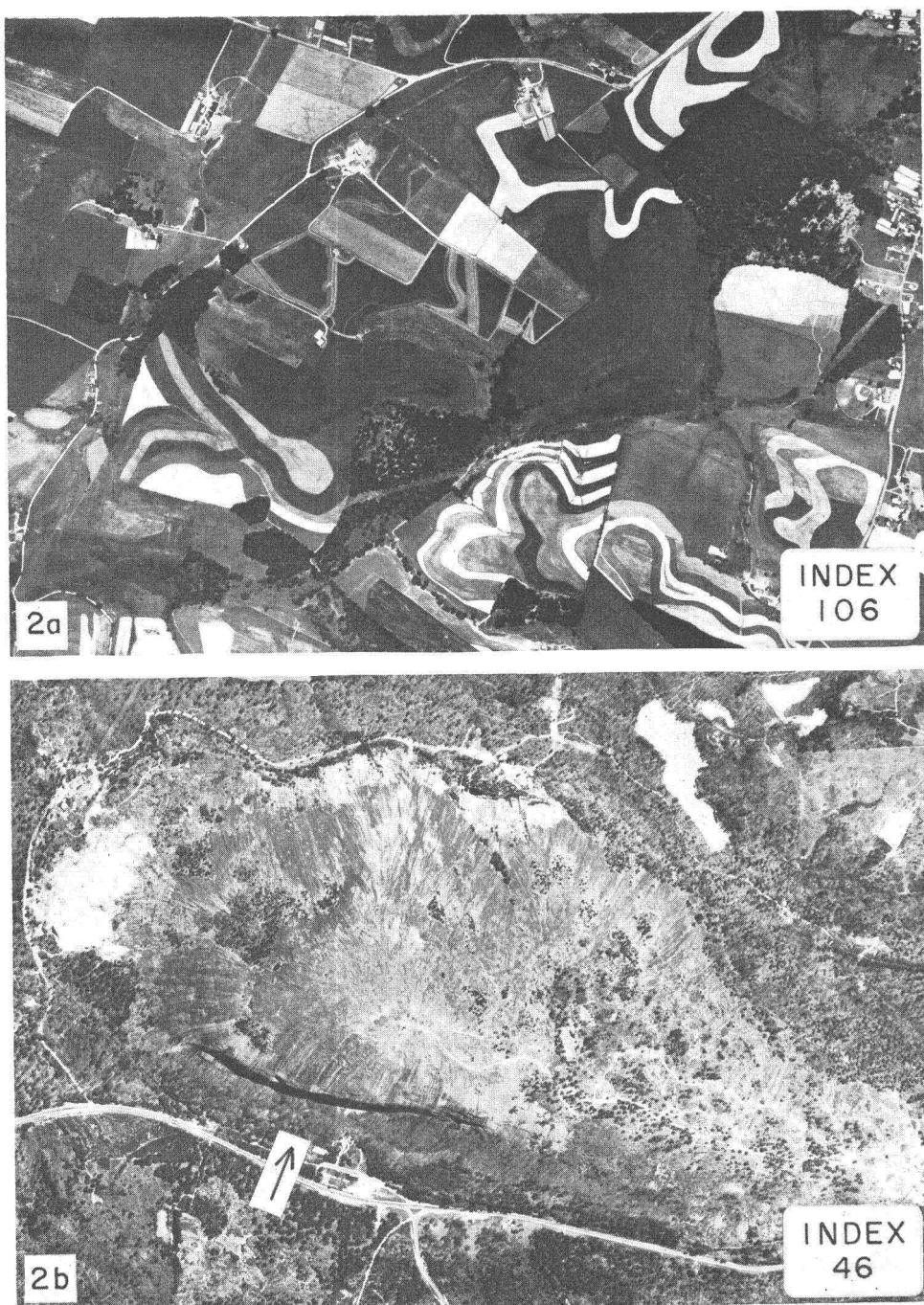


FIG. 2. Patterns of cultivated land in the rolling hills of Carroll County, Maryland (2a). At 2b is Stone Mountain, Georgia, a granite exfoliation dome located 16 miles east of Atlanta. The monadnock is about 7 miles in circumference and rises 1,200 feet above the surrounding terrain. An incomplete Civil War carving appears on the steep side (at arrow).

photography indexed here may be ordered from this laboratory.\*

The index was compiled primarily as an aid for research workers, instructors, and students in the fields of photographic interpretation, physical geography, geomorphology, and forestry. It may also serve as an annotated location guide to certain physiographic features within the thirty specified states. Figure 1 shows the geographic distribution of the localities that were indexed.

#### HOW FEATURES WERE SELECTED

Characteristic examples of principal physiographic regions were given first priority in

nated as the best single photograph for each locale. All prints listed were taken on panchromatic film at a nominal scale of 1:20,000 or about 1,667 feet per inch.

Several features planned for inclusion in the index were rejected because ASCS photography was not available in some localities. Negatives for USDA photography of Vermont, portions of Maine, and numerous Atlantic and Gulf Coastal counties are held by the Soil Conservation Service. Inquiries relative to such coverage may be addressed to the Director, Cartographic Division, SCS, Hyattsville, Maryland. Certain sections of Michigan were photographed for the U. S.

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*ABSTRACT: Photo interpreters, physical geographers, geomorphologists, and foresters should find that this index provides a ready source of representative or "typical" examples of aerial photographs in the United States. More than 200 physical and cultural features have been pin-pointed on contact prints at the USDA's Aerial Photography Laboratory in Asheville, N. C. Descriptions and requisite data for ordering these photographs, along with corresponding Geological Survey maps, are included.*

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the selected listing. An effort was also made to find aerial photographs depicting unusual land use patterns or unique physical features, e.g., Stone Mountain, Ga. A few items of a non-physiographic nature (strip mines, quarries, canals, dams, etc.) were included, because these features comprise an integral part of the landscape in which they appear. Publications listed at the end of this paper proved especially helpful in locating physical features. In many instances, descriptions of features in the index have been referenced to one of these literature citations by *underlined numbers*.

#### LOCATING PHOTOGRAPHIC COVERAGE

Airphotos covering the selected features were located on county photo index sheets at the ASCS laboratory in Asheville, N. C. Contact prints were normally selected as a series of three consecutive photographs in the same flight line, e.g., ATG-3BB-93 (94), 95. However, it was occasionally necessary to list three or more additional prints from an adjacent flight line to assure stereoscopic coverage of large or non-centered features. Parentheses were placed around the print number designa-

tion of corresponding or nearest discernible USGS quadrangle map. Dates shown for both photographs and maps indicate the most recent coverage known to be available. Of the photography listed, only the 1940 prints of Watuga County, N. C. were taken prior to 1951. Photo index numbers are shown, because some counties require several index sheets for complete coverage. The notation, "All 1" indicates that a single photo index covers the entire county. Photographic examples of several features listed are presented in Figures 2 through 6

#### USING THE INDEX

The index is arranged in alphabetical order by states, from Alabama to Wisconsin; features are numbered consecutively from 1 to 249. The county name is listed first, followed by county codes and exposure numbers, year of photography, number of the covering photo index sheet, description of feature, and designation of corresponding or nearest discernible USGS quadrangle map. Dates shown for both photographs and maps indicate the most recent coverage known to be available. Of the photography listed, only the 1940 prints of Watuga County, N. C. were taken prior to 1951. Photo index numbers are shown, because some counties require several index sheets for complete coverage. The notation, "All 1" indicates that a single photo index covers the entire county. Photographic examples of several features listed are presented in Figures 2 through 6

#### HOW TO ORDER ASCS PHOTOS

Prints should be ordered by county name,

\* Since this paper was prepared, all negative materials for the states of Arkansas and Louisiana have been transferred to the Western Aerial Photography Laboratory, 2505 Parleys Way, Salt Lake City, Utah.

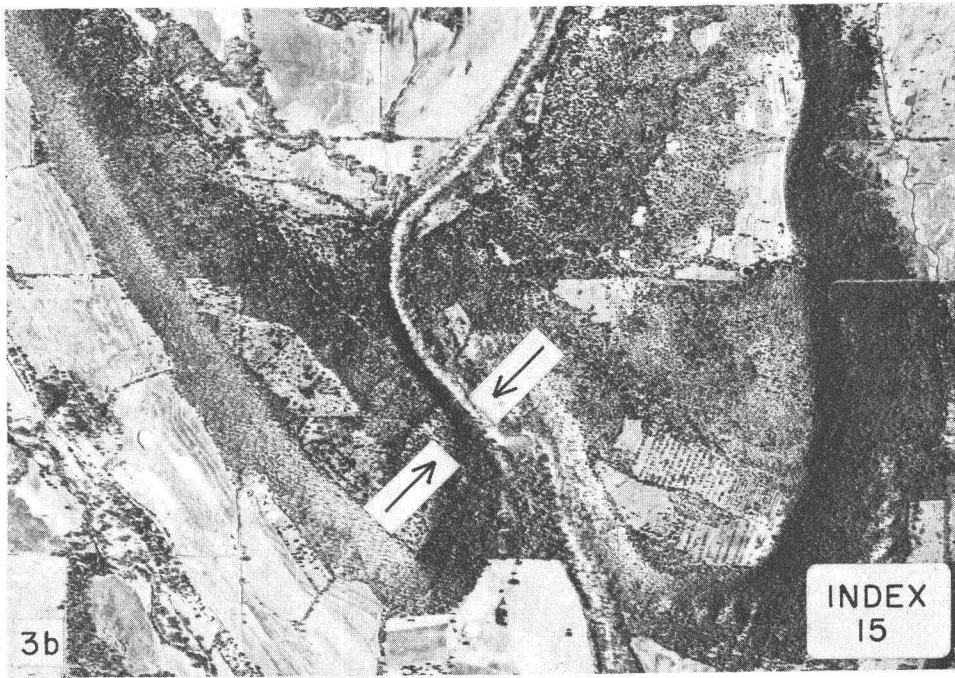
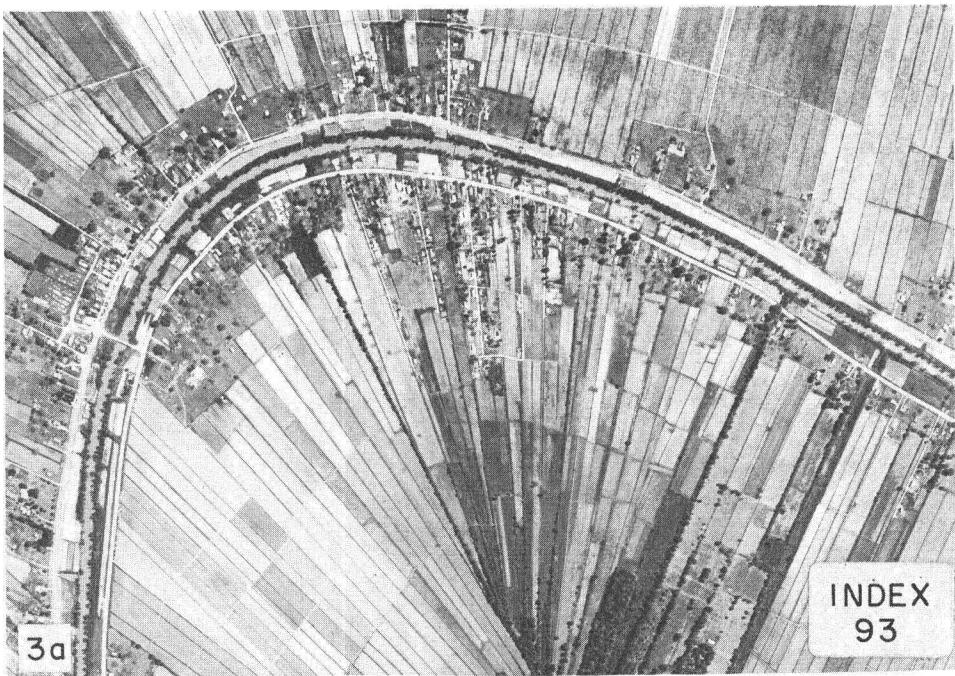


FIG. 3. French long lot patterns in Assumption Parish, Louisiana (3a). This pattern, found in several European countries, was brought over by early colonists who depended on river transportation. At 3b, located in Logan County, Arkansas, the nose of a plunging syncline is shown. The arrows point to a water gap eroded through the soft sediments of the syncline by Petit Jean Creek.

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
<b>ALABAMA</b>						
1	De Kalb	PM—2DD 252(253)254	1963	5	<i>Sand Mountain</i> —Southward extension of the Cumberland Plateau. <i>Lit. Cit.</i> (6, p. 253).	Painter (TVA)—1962 $7\frac{1}{2}'$ —1:24,000
2	Dallas	EH—6AA 62(63)64	1960	4	<i>Black Prairie</i> —Basin rimmed by cuestas; land use patterns. <i>Lit. Cit.</i> (6, p. 254).	Montgomery—1953 1:250,000
3	Henry	HG—3 CC 61(62)63	1961	3	<i>Coastal Plain</i> —Rolling Upland; karst features. <i>Lit. Cit.</i> (6, p. 255).	Dothan—1953 1:250,000
4	Wilcox	HX—3AA 43(44)45	1959	3	<i>Ripley Cuesta</i> —Belt of rugged hills; water gap of the Alabama River.	Montgomery—1953 1:250,000
5	Walker	BQE—3W 167(168)169	1959	2	<i>Warrior Coal Basin</i> —Synclinal basin; strip coal mining.	Birmingham—1963 1:250,000
6	Mobile	CPU—1BB 147(148)149	1960	7	<i>Dauphin Island</i> —Mouth of Mobile Bay; sand dunes and off-shore bars.	Cedar Point—1941 $15'$ —1:62,500 Ft. Morgan—1941 $15'$ —1:62,500
7	Mobile	CPU—2BB 226(227)228	1960	7	<i>Littoral Features</i> —Spit and tombolo. <i>Lit. Cit.</i> (5, pp. 350-353).	Mobile—1962 1:250,000
8	Marshall	HO—2DD 157(158)159	1962	2	<i>Tennessee River</i> —Guntersville Lake and Dam (TVA project).	Guntersville Dam—1948 $7\frac{1}{2}'$ —1:24,000
<b>ARKANSAS</b>						
9	Madison	CZO—2N 93(94)95	1954	4	<i>Boston Mountains</i> —Southern ramparts of the Ozark Plateau. <i>Lit. Cit.</i> (6, p. 234).	Harrison—1945 1:250,000 Russellville—1953 1:250,000
10	Logan	II—6BB 177(178)179	1961	4	<i>Petit Jean Valley</i> —Ridge and valley section of the Ouachita Mts. <i>Lit. Cit.</i> (6, p. 235).	Booneville—1934 $15'$ —1:62,500
11	Pulaski	EN—2BB 125(126)127	1960	1	<i>Ouachita Mountains</i> —Zigzag ridges of a plunging syncline; flatirons.	Little Rock—1953 1:250,000
12	Mississippi	EK—5CC 214(215)216	1963	2	<i>Mississippi River Floodplain</i> —Typical landscape; natural levee. <i>Lit. Cit.</i> (6, p. 236).	Evadale—1950 $15'$ —1:62,500
13	Arkansas	CCB—3EE 49(50)51	1964	3	<i>Silty Terraces</i> —Terraces of the Miss. River; rice cultivation. <i>Lit. Cit.</i> (6, p. 237).	De Witt—1949 $15'$ —1:62,500
14	Dallas	BPT—6R 13(14)15	1956	1	<i>Coastal Plain</i> —Rolling upland; land-use predominately forest. <i>Lit. Cit.</i> (6, p. 238).	El Dorado—1953 1:250,000
15	Logan	II—6BB 161(162)163	1961	3	<i>Water Gap, Ouachita Mts.</i> —Nose of plunging syncline breached by a stream.	Booneville—1934 $15'$ —1:62,500
16	Ashley	CFC—1W 195(196)197	1958	2	<i>Pimple Mounds</i> —Low mounds of unexplained origin; coastal plain. <i>Lit. Cit.</i> (3, p. 114).	Wil not—1960 $15'$ —1:62,500
17	Saline	BPW—1R 117(118)119	1956	5	<i>Bauxite Mining</i> —Open pit mining complex.	Benton—1938 $15'$ —1:62,500 Little Rock—1953 1:250,000
18	St. Francis	IQ—2DD 256(257) IH—2DD 258	1964	6	<i>St. Francis Basin</i> —Mississippi River alluvial lowland.	Whitmore—1955 $15'$ —1:62,500 Memphis—1953 1:250,000
19	Cross	IC—1DD 169(170)171	1964	3	<i>Crowley's Ridge</i> —Maturely dissected remnant of a former level plain. <i>Lit. Cit.</i> (3, pp. 87-89).	Memphis—1953 1:250,000
20	Baxter	COV—1N 28(29)30	1954	2	<i>Ozark Plateau</i> —Maturely dissected upland with flat-topped crests.	Harrison—1945 1:250,000
<b>CONNECTICUT</b>						
21	Hartford	CNE—3T 14(15)16	1957	2	<i>Farmington River Valley</i> —A section of the Conn. Valley; a Triassic Lowland. <i>Lit. Cit.</i> (6, p. 110).	Avon—1957 $7\frac{1}{2}'$ —1:24,000
22	Fairfield	DPD—4DD 72(73)74	1963	5	<i>Littoral Features</i> —Tombolo and a bay. <i>Lit. Cit.</i> (5, pp. 350-353).	Hartford—1946 1:250,000
23	New Haven	CNG—5DD 67(68)69	1963	5	<i>Stone Quarry</i> —Building stone, possibly sandstone or trap rock.	Wallingford—1954 $7\frac{1}{2}'$ —1:24,000
24	Middlesex	CNF—1T 189(190)191	1957	All 1	<i>Connecticut River and Valley</i> —Alluvial valley; features of antecedent stream.	Middletown—1952 $7\frac{1}{2}'$ —1:24,000 Middle Haddam—1952 $7\frac{1}{2}'$ —1:24,000
<b>DELAWARE</b>						
25	Kent	AHP—1AA 133(134)135	1961	1	<i>Coastal Plain</i> —Slightly rolling lowland, marshy. <i>Lit. Cit.</i> (6, p. 123).	Bowers—1934 $15'$ —1:62,500
26	Sussex	ANH—5AA 80(81)82	1961	3	<i>Rehoboth Bay</i> —Barrier beach and tidal inlet, sand dunes	Rehoboth Beach—1954 $7\frac{1}{2}'$ —1:24,000

DELAWARE (*Continued*)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
27	New Castle	AHQ—2AA 214(215)216	1962	3	<i>Chesapeake and Delaware Canal</i> —Shipping canal connecting Chesapeake Bay and Delaware River.	St. Georges—1953 $7\frac{1}{2}'$ —1:24,000
28	Sussex	ANH—5AA 30(31)32	1961	5	<i>Great Pocomoke Swamp</i> —Marsh woodland, artificially drained for cultivation along fringes.	Pittsville (CE)—1942 $7\frac{1}{2}'$ —1:24,000 Whaleyville—1942 $7\frac{1}{2}'$ —1:24,000
29	Sussex	ANH—5AA 120(121)122	1961	1	<i>Cape Henlopen</i> —Sandy spit, dunes.	Cape Henlopen—1954 $7\frac{1}{2}'$ —1:24,000
30	Sussex	ANH—4AA 70(71)72	1961	4	<i>Coastal Plain Terrace</i> —Eastward facing slope. <i>Lit. Cit.</i> (3, pp. 23-34)	Salisbury—1947 1:250,000 Seaford (CE)—1937 $15'$ —1:62,500
31	New Castle	AHQ—2AA 175(176)177	1962	2	<i>Tributaries of the Delaware River</i> —Features illustrating the development of estuaries.	Wilmington South—1948 $7\frac{1}{2}'$ —1:24,000
32	New Castle	AHQ—2AA 123(124)125	1962	2	<i>Wilmington Ship Yard</i>	Wilmington North—1954 $7\frac{1}{2}'$ —1:24,000 Wilmington South—1948 $7\frac{1}{2}'$ —1:24,000

## FLORIDA

33	Washington	CPJ—2BB 106(107)108	1961	4	<i>Gulf Coast Forest Belt</i> —Rolling lowland with Karst Features, swampy. <i>Lit. Cit.</i> (6, p. 256).	Wausau—1950 $7\frac{1}{2}'$ —1:24,000
34	Alachua	IT—1BB 23(24)25	1961	4	<i>Temperate—Subtropical Transition Zone</i> —Tung tree groves; lime sinks. <i>Lit. Cit.</i> (6, p. 257).	Citra—1893 $15'$ —1:62,500 Gainesville—1954 1:250,000
35	Polk	CTU—2V 179(180)181	1958	4	<i>Lake District</i> —Rolling upland limestone ridge; numerous lakes (lime sinks). <i>Lit. Cit.</i> (6, p. 258).	Winter Haven—1959 $7\frac{1}{2}'$ —1:24,000
36	Polk	CTU—10V 146(147)148	1958	4	<i>Citrus Fruit Zone</i> —Part of the Lake District; citrus groves; lakes.	Orlando—1955 1:250,000 P't. Pierce—1956 1:250,000
37	Washington	CPJ—2BB 222(223)224	1961	4	<i>Karst Topography</i> —Many lime sinks and lakes; little surface drainage.	Crystal Lake—1944 $7\frac{1}{2}'$ —1:24,000
38	Dade	BUP—2DD 108(109)110	1963	6	<i>Everglades</i> —Extensive marshland of sawgrass and mangrove swamps.	Miami—1956 1:250,000
39	Martin	EEP—1V 55(56)57	1958	1	<i>Intracoastal Waterway</i> —St. Lucie Inlet.	St. Lucie Inlet—1948 $7\frac{1}{2}'$ —1:24,000
40	Palm Beach	BUM—2T 43(44)45	1957	2	<i>Lake Okeechobee</i> —Portion of the shore & a retaining dike.	West Palm Beach—1956 1:250,000
41	Polk	CTU—5B 95(96)97	1958	3	<i>Phosphate Mine</i> —Open pit mining.	Bartow—1949 $7\frac{1}{2}'$ —1:24,000

## GEORGIA

42	Baker	IW—1DD 90(91)92	1962	2	<i>Dougherty Plains</i> —Section of the Coastal Plain, pitted with sinks. <i>Lit. Cit.</i> (6, p. 261).	Newton—1956 $15'$ —1:62,500
43	Crawford	ATW—6W 205(206)207	1958	4	<i>Fall Line</i> —Contact between the Piedmont and the Upper Coastal Plain. <i>Lit. Cit.</i> (6, p. 262).	Fort Valley—1956 $15'$ —1:62,500
44	Bartow	IZ—4AA 46(47)48	1960	All 1	<i>Great Appalachian Valley</i> —Bordering the Piedmont Hills, fault line clearly shown. <i>Lit. Cit.</i> (6, p. 263).	Stilesboro—1906 $15'$ —1:62,500
45	Jenkins	KN—1EE 56(57)58	1963	2	<i>Big Dukes Pond</i> —Solution depression with bay characteristics, Middle Coastal Plain. <i>Lit. Cit.</i> (6, p. 264).	Millen (CE)—1942 $15'$ —1:62,500
46	De Kalb	ATI—6AA 153(154)155	1960	All 1	<i>Stone Mountain</i> —Granitic exfoliation dome on Georgia Piedmont.	Stone Mountain—1956 $7\frac{1}{2}'$ —1:24,000
47	Stewart	LN—2DD 127(128)129	1962	2	<i>Providence Canyons</i> —Gullies resulting from erosion. <i>Lit. Cit.</i> (3, p. 71).	Lumpkin SW—1955 $7\frac{1}{2}'$ —1:24,000
48	Clarke	ATG—2BB 173(174)175	1960	All 1	<i>Piedmont Plateau</i> —Dissected upland, rolling to hilly surface.	Athens—1953 1:250,000
49	Fannin	EMX—2EE 116(117)118	1963	1	<i>Blue Ridge</i> —Broad belt of ridges and narrow valleys, trellis drainage.	Blue Ridge (TVA)—1946 $7\frac{1}{2}'$ —1:24,000 Rome—1958 1:250,000
50	Dawson	ATH—2EE 17(18)19	1963	2	<i>Amicalola Falls</i> —Lake and dam; North central Blue Ridge Section.	Rome—1958 1:250,000
51	Union	EMZ—4EE 38(39)40	1963	4	<i>Area of Neel's Gap</i> —Water gap through a section of the Blue Ridge.	Coosa Bald (TVA)—1938 $7\frac{1}{2}'$ —1:24,000

## GEORGIA (Continued)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
52	Walker	MA—3AA 48(49, 50) 51	1960	2	<i>Lookout Mountain</i> —Southward projection of the Cumberland Plateau, sharply defined scarp face. <i>Lit. Cit.</i> (3, pp. 268, 336).	Hooker (TVA)—1945 $7\frac{1}{2}'$ —1:24,000 Durham (TVA)—1946 $7\frac{1}{2}'$ —1:24,000
<b>ILLINOIS</b>						
53	Franklin	BGM—1W 114(115)116	1959	All 1	<i>Illinoian Drift Plain</i> —Smoothly rolling plain; meander bends of the Big Muddy River. <i>Lit. Cit.</i> (6, p. 147).	Ina—1939 $15'$ —1:62,500 Duquoin—1949 $15'$ —1:62,500
54	Knox	ATCH—1DD 76(77)78	1963	2	<i>Central Prairie</i> —Loessal plains, dissected. <i>Lit. Cit.</i> (6, p. 148).	Maquon—1941 $15'$ —1:62,500 Galesburg—1925 $15'$ —1:62,500
55	Pulaski	BHA—4W 68(69)70	1959	All 1	<i>Little Egypt</i> —Northeastward extension of the Ozark Plateau, cotton cultivation.	Cairo—1953 $15'$ —1:62,500 Dongola—1920 $15'$ —1:62,500
56	Lake	BWX—2BB 50(51)52	1961	2	<i>Pitted Outwash Plain</i> —Glacial till; Valparaiso Moraine, distinguishable by the mottled appearance of the soil.	Gray's Lake—1920 $15'$ —1:62,500
57	Calhoun	SG—1CC 4(5)6	1962	3	<i>Confluence of Miss. and Illinois Rivers</i> (Glacial Spillway)—Floodplain and bluff hills.	Grafton—1954 $7\frac{1}{2}'$ —1:24,000
58	Madison	SJ—2CC 174(175)176	1962	2	<i>Confluence of Miss. and Missouri Rivers</i> —Miss. Floodplain, Meander scars and sand bars.	Wood River—1955 $7\frac{1}{2}'$ —1:24,000 Columbia Bottom—1951 $7\frac{1}{2}'$ —1:24,000
59	Jo Daviess	BWT—2V 72(73)74	1958	2	<i>Dubuque Hills</i> —Southernmost extension of Wis. Driftless area.	Elizabeth—1909 $15'$ —1:62,500
60	Jo Daviess	BWT—2V 184(185)186	1958	2	<i>Charles Mound</i> —Remnant of the Niagara Escarpment; highest point in Illinois.	Elizabeth—1909 $15'$ —1:62,500
61	Cook	BWQ—3AA 26(27)28	1961	3	<i>Chicago Drainage Canal</i> —Ancient spillway for glacial Lake Chicago	Berwyn—1953 $7\frac{1}{2}'$ —1:24,000 Englewood—1953 $7\frac{1}{2}'$ —1:24,000
62	Pike	AR—3CC 96(97)98	1962	3	<i>Quincy Hills</i> —Bluffs along the Miss. River; contour plowing.	Barry—1936 $15'$ —1:62,500 Quincy—1944 1:250,000
63	Pike	AR—3CC 111(112)113	1962	4	<i>Floodplain of Miss. River</i> —Typical flood plain, braided stream	Quincy—1944 1:250,000
64	Alexander	BFZ—4W 123(124)125	1959	All 1	<i>Beckett Hills</i> —Extension of Ozark Plateau; narrows of the Miss. River.	Paducah—1942 1:250,000
65	Jackson	BGQ—6W 62(63)64	1959	2	<i>Strip Mines</i> —Eastern Interior Coalfield.	Murphyboro—1938 $15'$ —1:62,500 Carbondale—1941 $15'$ —1:62,500
<b>INDIANA</b>						
66	Clinton	BWF—1CC 147(148)149	1962	2	<i>Central Plains</i> —Extension of the Western Ohio drift plain. <i>Lit. Cit.</i> (6, p. 145).	Rossville—1961 $7\frac{1}{2}'$ —1:24,000
67	Floyd	RJ—2AA 107(108)109	1960	All 1	<i>Knobstone Escarpment</i> —Eastern edge of Norman Upland; contrast in land-use. <i>Lit. Cit.</i> (6, p. 146) and (3, pp. 425–427).	New Albany—1960 $7\frac{1}{2}'$ —1:24,000 Georgetown—1949 $7\frac{1}{2}'$ —1:24,000
68	LaPorte	BFK—1V 154(155)156	1958	4	<i>Kankakee Basin</i> —Alluvial basin of glacial origin.	Chicago—1953 1:250,000
69	LaPorte	BFK—2V 166(167)168	1958	1	<i>Valparaiso Moraine</i> —Terminal moraine; kettles. <i>Lit. Cit.</i> (3, p. 480–481).	Chicago—1953 1:250,000
70	Lawrence	QY—2AA 20(21)22	1960	All 1	<i>Stone Quarries</i> —Limestone quarries of Bedford.	Bedford East—1958 $7\frac{1}{2}'$ —1:24,000
71	Harrison	RF—1AA 27(28)29	1960	4	<i>Norman Upland</i> —Maturely dissected plateau; Ohio River. <i>Lit. Cit.</i> (3, pp. 425–427).	Lanesville—1960 $7\frac{1}{2}'$ —1:24,000 Kosmosdale—1950 $15'$ —1:62,500
72	Porter	BFP—2V 47(48)49	1958	All 1	<i>Lake Michigan Shore</i> —Active sand dunes.	Dune Acres—1953 $7\frac{1}{2}'$ —1:24,000
73	Posey	QU—5B 53(54)55	1958	All 1	<i>Ohio River Floodplain</i> —Contact between the plain and overlooking bluffs; contrast in land-use.	Uniontown—1914 $15'$ —1:62,500
74	Lake	BFJ—2V 94(95, 96)97	1958	1	<i>Industrial Complex</i> —Along shore of Lake Michigan; docks.	Gary & Vicinity—1953 $15'$ —1:62,500
<b>IOWA</b>						
Harrison		BKC—1AA 67(68)69	1960	4	<i>Loess Plain</i> —Strongly rolling plain; active stream erosion apparent. <i>Lit. Cit.</i> (6, p. 158).	Omaha—1954 1:250,000

IOWA (*Continued*)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
76	Monroe	AJF—1CC 205(206)207	1961	4	<i>Loess Hills</i> —Dissected loess-covered till prairies. <i>Lit. Cit.</i> (6, p. 159).	Centerville—1954 1:250,000
77	Pottawattamie	BKP—1AA 69(70)71	1960	3	<i>Bluffs of the Missouri River</i> —Dissected loess plains.	Omaha North—1956 7½'—1:24,000 Omaha South—1956 7½'—1:24,000
78	Dubuque	SV—2T 95(96)97	1957	4	<i>Dubuque Hills</i> —Southwestern extension of the Driftless Area of Wisconsin.	East Dubuque—1935 15'—1:62,500
79	Cherokee	BJW—1WC 190(191)192	1961	3	<i>Iowan Drift Border</i> —Contact between Iowan Drift Surface & dissected till plains.	Ft. Dodge—1954 1:250,000
80	Polk	BKO—2CC 112(113)114	1961	2	<i>Young Glacial Plains</i> —Unmodified till plain surface.	Des Moines—1956 15'—1:62,500

## KENTUCKY

81	Breathitt	BUA—1V 114(115)116	1959	All 1	<i>Eastern Kentucky Hills</i> —Maturely dissected Cumberland Plateau. <i>Lit. Cit.</i> (6, p. 134).	Jackson—1951 7½'—1:24,000
82	Bourbon	AFI—2AA 154(155)156	1960	3	<i>Inner Region of the Bluegrass Basin</i> —Rolling Plains. <i>Lit. Cit.</i> (6, p. 135).	Paris West—1954 7½'—1:24,000
83	Bourbon	AFI—5AA 56(57)58	1960	4	<i>Eden Bell (Shale Zone)</i> —Transition zone between the Inner & Outer Bluegrass Regions. <i>Lit. Cit.</i> (3, p. 429-430).	Paris East—1952 7½'—1:24,000 North Middletown—1952 7½'—1:24,000
84	Edmonson	ALM—2AA 138(139)140	1960	All 1	<i>Karst Lands</i> —Southern Portion of the Pennyroyal Plain; typical Karst area. <i>Lit. Cit.</i> (6, p. 136).	Rhoda—1954 7½'—1:24,000 Brownsville—1954 7½'—1:24,000
85	Hopkins	AEH—1W 189(190)191	1959	4	<i>Western Coal Measures</i> —Low hills & plains; strip mining. <i>Lit. Cit.</i> (6, p. 137).	Hanson—1952 7½'—1:24,000 Beech Grove—1952 7½'—1:24,000
86	Christian	AED—6W 64(65)66	1959	4	<i>Dripping Springs Escarpment</i> —Cuesta bordering the Pennyroyal Plateau on the north. <i>Lit. Cit.</i> (5, p. 144).	Hopkinsville—1950 7½'—1:24,000
87	Nelson	AGF—1DD 42(43)44	1963	3	<i>The Knobs</i> —Outer rim of the Bluegrass Basin. <i>Lit. Cit.</i> (2, pp. 418-419).	Cravens—1949 7½'—1:24,000 Bardstown—1953 7½'—1:24,000
88	Bell	BUG—4V 150(151)152	1961	All 1	<i>Blue Ridge</i> —Sharply defined Pine Mt. fault. <i>Lit. Cit.</i> (5, pp. 329-333).	North Middlesboro—1959 7½'—1:24,000 Kayay—1959 7½'—1:24,000
89	Franklin	AFR—2DD 103(104)105	1963	1	<i>Entrenched Meanders of Kentucky River</i> —Antecedent stream features. <i>Lit. Cit.</i> (5, pp. 202-203).	Polsgrove—1953 7½'—1:24,000 Frankfort West—1953 7½'—1:24,000
90	Henry	AFU—4AA 81(82)83	1960	4	<i>Meander Spurs of the Kentucky River</i> — <i>Lit. Cit.</i> (5, pp. 202-203).	Worthville—1952 7½'—1:24,000 Gratz—1953 7½'—1:24,000

## LOUISIANA

91	Tensas	CTO—3BB 119(120)121	1960	3	<i>Tensas Basin</i> —Mississippi lowland basin; oxbow lakes and meander scars. <i>Lit. Cit.</i> (6, p. 239) & (1, pp. 39-40).	Locust Ridge (MRC)—1939 15'—1:62,500 Davis Island (MRC)—1937 15'—1:62,500
92	Lafayette	CEI—2DD 89(90)91	1963	3	<i>Coastal Prairie</i> —Flat lowland with scattered depressions; rice cultivation. <i>Lit. Cit.</i> (6, p. 240).	Lafayette—1955 7½'—1:24,000
93	Assumption	CEF—5T 198(199)200	1957	2	<i>Mississippi Lowland</i> —French long lot settlement pattern. <i>Lit. Cit.</i> (6, p. 241).	Napoleonville (MRC)—1952 15'—1:62,500
94	St. Landry	CEK—1DD 245(246)247	1963	5	<i>Achachalaya Basin</i> —Distributary of Miss. R.; oil fields. <i>Lit. Cit.</i> (3, p. 98).	Palmetto—1939 15'—1:62,500
95	Iberia	CEH—11T 24(25)26	1957	4	<i>Every Island</i> —Low young salt dome; radial drainage lines. <i>Lit. Cit.</i> (5, pp. 508, 517).	Derouen (MRC)—1937 15'—1:62,500
96	Beauregard	DNI—5CC 7(8)9	1962	4	<i>Pine Flats</i> —Inner zone of the Coastal Lowland; river bluffs.	Lake Charles—1954 1:250,000
97	Claiborne	CEZ—5W 21(22)23	1959	All 1	<i>Ouachita-Red River Rolling Land</i> —Up-land surface, highest area of Louisiana, <i>Nita Crevasse</i> —Natural levee and large crevasses.	Summerfield—1951 15'—1:62,500
98	Ascension	CQE—1T 95(96)97	1957	3		Donaldsonville (MRC)—1937 15'—1:62,500
99	Calcasieu	CGG—1DD 285(286)287	1963	6	<i>Oil Field</i> —Wells and central pumping station	DeQuincy—1956 15'—1:62,500 Lake Charles—1954 1:250,000

## LOUISIANA (Continued)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
100	Calcasieu	CGG—1DD 164(165)166	1963	2	Sulfur Wells—Also oil wells	Sulfur—1955 15'—1:62,500
101	Cameron	CJW—5T 140(141)142	1957	7	Marine Terraces—Near tidal inlet of Calcasieu Pass.	Cameron—1934 7½'—1:24,000 Cameron—1955 15'—1:62,500

## MAINE

102	Aroostook	AHZ—4CC 42(43)44	1962	7	<i>Aroostook Plain</i> —Glaciated rolling plain; French long lots. <i>Lit. Cit.</i> (6, p. 104).	Presque Isle—1954 1:250,000
103	Aroostook	AHZ—4CC 105(106)107	1962	13	<i>Elongated Continuous Esker</i> . <i>Lit. Cit.</i> (7, p. 8).	Presque Isle—1953 15'—1:62,500 Mars Hill—1951 15'—1:62,500
104	Penobscot	AIA—6CC 75(76)77	1962	1	<i>Katahdin Mountains</i> —Granitic intrusion mountains, extremely glaciated; cirques	Island Falls—1940 15'—1:62,500

## MARYLAND

105	Dorchester	ANJ—4EE 186(187)188	1964	1	<i>Chesapeake Shoreline</i> —Delmarva Peninsula; tidal marshes. <i>Lit. Cit.</i> (6, p. 124).	Blackwater River—1942 7½'—1:24,000 Crapo—1904 15'—1:62,500
106	Carroll	AGZ—1DD 111(112)113	1963	3	<i>Upper Piedmont</i> —Strongly rolling, dissected upland. <i>Lit. Cit.</i> (6, p. 125).	Winfield—1944 7½'—1:24,000
107	Garrett	AMO—3AA 231(232)233	1962	3	<i>Allegheny Plateau</i> —Hilly upland surface; a portion of Negro Mt. <i>Lit. Cit.</i> (6, p. 126).	Accident—1947 7½'—1:24,000
108	Washington	AHB—4T 152(153)154	1958	3	<i>Great Appalachian Valley</i> —Valley floor and adjacent South Mt., wind gap.	Hagerstown—1953 7½'—1:24,000
109	Prince George	AHV—3DD 245(246)247	1963	2	<i>Sand and Gravel Quarries</i> —Coastal Plain.	Lanham—1957 7½'—1:24,000 Davidsonville—1957 7½'—1:24,000

## MASSACHUSETTS

110	Worcester	DPV—3K 185(186)187	1952	5	<i>Central Massachusetts Upland</i> —Morainic outwash plain. <i>Lit. Cit.</i> (6, p. 108).	Clinton—1950 7½'—1:24,000
111	Worcester	DPV—3K 71(72)73	1952	5	<i>Mt. Wachusett</i> —Monadnock on New England Summit peneplain; glaciated; cirques.	Wachusett Mtn.—1956 7½'—1:24,000
112	Hampden	CNI—4T 2(3)4	1958	2	<i>Connecticut Valley Lowland</i> —Triassic lowland; structural fault.	Springfield North—1958 7½'—1:24,000
113	Norfolk	DPS—6K 123(124)125	1952	3	<i>Boston Basin</i> —Interior of basin; drumlins, small interlobate eskers.	Boston & Vicinity—1958 15'—1:62,500
114	Essex	DPP—9K 91(92)93	1952	4	<i>Boston Bay and Vicinity</i> —Drumlin field; complex tombolos. <i>Lit. Cit.</i> (1, p. 90).	Boston South—1956 7½'—1:24,000 Hull—1958 7½'—1:24,000
115	Bristol	DPN—1K 48(49)50	1952	2	<i>Narragansett Basin</i> —Rolling lowland-basin.	Taunton—1949 7½'—1:24,000
116	Berkshire	DPM—3K 65(66)67	1952	5	<i>Berkshire Hills</i> —Section of the New England Upland Plateau.	Cheshire—1960 7½'—1:24,000
117	Berkshire	DPM—3K 96(97)98	1952	2	<i>Taconic Range</i> —Longitudinal ridges and narrow valleys. <i>Lit. Cit.</i> (1, p. 71) and (3, p. 355).	Berlin—1960 7½'—1:24,000 Williamstown—1960 7½'—1:24,000
118	Barnstable	DPL—2K 140(141)142	1952	4	<i>Cape Cod</i> —Cut-off bays and barrier beaches. <i>Lit. Cit.</i> (1, pp. 50-51).	Falmouth—1957 7½'—1:24,000
119	Barnstable	DPL—3K 4(5)6	1952	1	<i>Cape Cod</i> —Sea cliffs and dunes. <i>Lit. Cit.</i> (1, p. 51).	Wellfleet—1958 7½'—1:24,000
120	Barnstable	DPL—5K 84(85)86	1952	2	<i>Cape Cod</i> —Lagoon and small spit; bars. <i>Lit. Cit.</i> (1, p. 51).	Provincetown—1958 7½'—1:24,000
121	Barnstable	DPL—4K 6(7)8	1952	2	<i>Cape Cod</i> —Terminal moraine and outwash plain. <i>Lit. Cit.</i> (1, pp. 46-48).	Hyannis—1961 7½'—1:24,000 Dennis—1961 7½'—1:24,000
122	Dukes	DPO—2K 2(3)4	1952	All 1	<i>Marthas Vineyard</i> —Cut-off bays (shoreline lakes) and barrier beaches.	Tisbury Great Pond—1951 7½'—1:24,000
123	Essex	DPP—9K 91(92)93	1952	4	<i>Marblehead</i> —Large tombolo. <i>Lit. Cit.</i> (1, pp. 98-99).	Marblehead South—1956 7½'—1:24,000 Marblehead North—1956 7½'—1:24,000
124	Worcester	DPV—1K 7(8)9	1952	4	<i>Quabbin Reservoir</i> —Connecticut Valley; drumlins.	Quabbin Reservoir—1952 7½'—1:24,000

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
<b>MICHIGAN</b>						
125	Jackson	BDV—4P 69(70)71	1957	3	<i>Southern Michigan Upland</i> —Rolling till plain, poorly drained. <i>Lit. Cit.</i> (6, p. 141).	Spring Harbor—1948 15'—1:62,500
126	Bay	BDC—1DD 20(21)22	1963	3	<i>Saginaw Basin</i> —Glacial lake plain; improved drainage. <i>Lit. Cit.</i> (6, p. 143).	Bay City—1916 15'—1:62,500 Flint—1954 1:250,000
127	Bay	BDC—1DD 46(47)48	1963	1	<i>Saginaw Basin</i> —Lake plain and water-lain moraine. <i>Lit. Cit.</i> (6, p. 143).	Bay City—1916 15'—1:62,500 Flint—1954 1:250,000
128	Ontonagon	BWC—3N 155(156)157	1954	All 1	<i>Superior Upland</i> —Northern Peninsula, glacial terrain; disrupted drainage. <i>Lit. Cit.</i> (6, p. 114).	Watersmeet—1952 15'—1:62,500
129	Keweenaw	DVH—3N 89(90)91	1954	3	<i>Copper Range</i> —Keweenaw Peninsula; mining complex. <i>Lit. Cit.</i> (3, pp. 543—544).	Mohawk—1946 7½'—1:24,000 Ahmeek—1946 7½'—1:24,000
130	Houghton	DVG—2N 141(142)143	1954	1	<i>Glacial Lake Beach Ridges</i> —Eastern shore of Keweenaw Peninsula. <i>Lit. Cit.</i> (1, pp. 213—221).	Houghton—1954 15'—1:62,500 Oskar—1954 7½'—1:24,000
131	Wayne	XU—1P 33(34)35	1957	1	<i>Belle Isle</i> —River island (Detroit River).	Belleview—1952 7½'—1:24,000
132	Alger	BVS—6K 132(133)134	1953	1	<i>Sand Dunes</i> —Lake Superior shores, Northern Peninsula	Grand Portal Point—1958 15'—1:62,500 Munising—1958 15'—1:62,500
133	Ingham	BDR—2DD 37(38)39	1963	2	<i>Kettle Moraine</i> —Ground moraine deposits, Southern Michigan Upland.	Fowlerville—1908 15'—1:62,500 Mason—1909 15'—1:62,500
134	Chippewa	BVT—21K 60(61)62	1953	1	<i>St. Marys River</i> —St. Lawrence Seaway.	Sault St. Marie—1951 15'—1:62,500 Sault St. Marie (S)—1951 15'—1:62,500
135	Berrien	AIT—3AA 182(183)184	1960	3	<i>Sand Dunes</i> —Lake Michigan shores.	Three Oaks—1927 15'—1:62,500 Benton Harbor—1927 15'—1:62,500
136	Menominee	BWB—7N 190(191), BWB—2N 114	1954	4	<i>Drumlin Field</i> —Northern Peninsula; glaciated upland.	Escanaba—1954 1:250,000
<b>MISSISSIPPI</b>						
137	Harrison	CZJ—7V 39(40)41	1958	3	<i>Lower Gulf Coastal Plain</i> —Broad alluvial valleys; contrasts in land use. <i>Lit. Cit.</i> (6, p. 242).	Vestry—1954 15'—1:62,500 Biloxi—1954 7½'—1:24,000
138	Yazoo	NY—3AA 90(91)92	1959	4	<i>Bluff Hills</i> —Dissected loess-covered upland, bordering the Miss. alluvial valley. <i>Lit. Cit.</i> (6, p. 248).	Valley (MRC)—1940 15'—1:62,500 Mechanicsburg (MRC)—1940 15'—1:62,500
139	Sunflower	AVL—3CC 79(80)81	1962	2	<i>Yazoo Basin</i> —Miss. River bottom; meander scars and cut-offs. <i>Lit. Cit.</i> (6, p. 244).	Mound Bayou—1931 15'—1:62,500
140	Calhoun	ML—2EE 23(24)25	1963	1	<i>Upper Coastal Plain</i> —Dissected, rolling upland; land use patterns. <i>Lit. Cit.</i> (6, p. 243).	Pittsboro—1954 15'—1:62,500
141	Lee	NB—1EE 11(12)13	1964	2	<i>Black Prairie</i> —Shallow belt basin, intensively cultivated. <i>Lit. Cit.</i> (6, p. 246).	Tupelo—1956 1:250,000 Tupelo—1921 15'—1:62,500
142	Rankin	CPR—7AA 31(32)33	1959	1	<i>Jackson Prairie</i> —Gently rolling low-land; prairie belt.	Pelahatchie—1950 15'—1:62,500 Florence—1906 15'—1:62,500
143	Forrest	CZH—5V 142(143)144	1958	1	<i>Pine Hills</i> —Maturely dissected upland; contouring & terracing p.-dominant.	Hattiesburg—1953 1:250,000
144	Bolivar	AVF—1CC 127(128)129	1962	2	<i>Mississippi Floodplain</i> —Old age stream features (meander scar, ox bow lakes).	Lamont (MRC)—1939 15'—1:62,500
145	Newton	AVC—9AA 142(143)144	1960	All 1	<i>Red Hills</i> —Belt of sand hills; dissected escarpment. <i>Lit. Cit.</i> (3, pp. 39—40).	Meridian—1953 1:250,000
146	Pontotoc	NM—4EE 144(145)146	1964	1	<i>Pontotoc Ridge</i> —Western extension of the Ripley Cuesta of Alabama <i>Lit. Cit.</i> (3, pp. 68, 71—72).	New Albany—1949 15'—1:62,500 Sherman—1955 15'—1:62,500

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
<b>MISSOURI</b>						
147	Franklin	TP—4V 142(143)144	1958	1	<i>Ozark Border</i> —Dissected plateau; active erosion on sloping land. <i>Lit. Cit.</i> (6, p. 160).	Washington—1948 15'—1:62,500
148	Iron	BLM—3P 63(64)65	1955	2	<i>St. Francis Mountains</i> —Fractured granitic knobs, wooded; settlement patterns. <i>Lit. Cit.</i> (6, p. 161).	Des Arc—1926 15'—1:62,500
149	Iron	BLM—5P 186(187)188	1955	1	<i>Ozark Center</i> —Rugged upland surface, the Ozark plateau proper. <i>Lit. Cit.</i> (6, p. 161).	Edgehill—1924 15'—1:62,500 Ironton—1945 15'—1:62,500
150	Ray	BS—1DD 201(202)203	1963	3	<i>Missouri River Valley and Bordering Hills</i> —Bottomland and adjacent glaciated upland. <i>Lit. Cit.</i> (6, p. 162).	Camden—1950 7½'—1:24,000
151	Audrain	BYL—2CC 4(5)6	1962	1	<i>Moherly Plain</i> —“Little Dixie,” undissected loess covered till plain. <i>Lit. Cit.</i> (3, p. 597).	Wellsville—1939 15'—1:62,500 Mexico—1929 15'—1:62,500
152	Miller	BLS—2BB 114(115)116	1961	3	<i>Lake of the Ozarks and Bagwell Dam</i> —Estuary features.	Lake Ozark—1959 7½'—1:24,000 Bagwell—1959 7½'—1:24,000
153	Dunklin	UC—3W 131(132)133	1959	1	<i>Crowley's Ridge</i> —Maturely dissected remnant of a high level plain; drainage divide of Miss. alluvial valley. <i>Lit. Cit.</i> (3, pp. 87–90).	Valley Ridge (MRC)—1955 15'—1:62,500 Piggott (MRC)—1955 15'—1:62,500
154	Stoddard	TY—5W 26(27)28	1959	3	<i>St. Francis Basin</i> —Miss. alluvial lowland; improved drainage.	Bloomfield—1931 15'—1:62,500
155	Scotland	BZB—2CC 30(31)32	1963	2	<i>Loess-covered Till Prairies</i> —Typical loessland; finely textured drainage.	Centerville—1954 1:250,000
156	Jefferson	TR—3W 63(64)65	1959	2	<i>Crystal Escarpment</i> —Part of the Ozark dome. <i>Lit. Cit.</i> (3, pp. 650–651).	Crystal City—1949 15'—1:62,500
157	Greene	BLJ—3AA 42(43)44	1960	All 1	<i>Springfield Plateau</i> —Slightly modified peneplain with Karst features.	Springfield—1960 7½'—1:24,000
<b>NEW HAMPSHIRE</b>						
158	Hillsborough	DQU—6K 173(174)175	1952	1	<i>Southern New Hampshire Hills</i> —Glaciated upland, dissected, land use patterns. <i>Lit. Cit.</i> (6, p. 106).	Hillsboro—1957 15'—1:62,500
159	Cheshire	DQT—4K 59(60)61	1952	4	<i>Mount Monadnock</i> —Glaciated erosional remnant of the White Mts. <i>Lit. Cit.</i> (3, p. 359).	Monadnock—1949 15'—1:62,500
160	Coos	DXU—1N—204 and DXU—6N—(43)44	1955	4	<i>Presidential Range</i> —“Biscuit-board” topography.	Mt. Washington—1935 15'—1:62,500 Gorham—1937 15'—1:62,500
161	Grafton	DXV—1N 234(235)236	1955	5	<i>Franconian Notch</i> —Pemigewasset River gorge through the Franconian Range.	Franconia—1929 15'—1:62,500 Plymouth—1928 15'—1:62,500
162	Carroll	DXT—1N 156(157)158	1954	6	<i>Summit Peneplain</i> —Typical glaciated till plain; swampy depressions and scattered lakes.	Wolfeboro—1958 15'—1:62,500
163	Rockingham	DQW—9K 197(198)199	1952	4	<i>Coastal Plain</i> —Submergent coastline; coastal marshes.	Portsmouth—1956 7½'—1:24,000 Dover—1956 15'—1:62,500
<b>NEW JERSEY</b>						
164	Cumberland	CMW—3DD 20(21)22	1963	4	<i>Southwestern Coastal Plain</i> —Low, rolling land. Intensive land use. <i>Lit. Cit.</i> (6, p. 122).	Bridgeton—1953 7½'—1:24,000 Bridgeton (CE)—1942 15'—1:62,500
165	Cumberland	CMW—3DD 93(94)95	1963	4	<i>The Glades</i> —Coastal Marshland.	Cedarville—1956 7½'—1:24,000
166	Sussex	EAT—1DD 175, 176(177, 178) 179, 180	1963	1	<i>Great Appalachian Valley</i> —Adjacent to the Kittatinny Mts.; drumlins.	Newton West—1954 7½'—1:24,000 Dingmans Ferry—1954 15'—1:62,500
167	Warren	EAU—3DD 50(51, 52)53	1963	2	<i>Delaware Water Gap</i> —Gap cut by the Delaware River through Kittatinny Mts.	Delaware Water Gap—1936 15'—1:62,500 Stroudsburg—1955 7½'—1:24,000
168	Hunterdon	CMY—2DD 146(147)148	1963	4	<i>Piedmont Plateau</i> —Dissected upland covered by glacial till.	High Bridge—1954 7½'—1:24,000 Califon—1954 7½'—1:24,000

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
<b>NEW YORK</b>						
169	Schoharie	CXH—1AA 13(14)15	1960	1	<i>Fullonham Basin</i> —Alluvial valley of the Appalachian Plateau. <i>Lit. Cit.</i> (6, p. 112).	Breakabeen—1943 $7\frac{1}{2}'$ —1:24,000
170	Herkimer	CXG—1AA 79(80)81	1960	5	<i>Mohawk Valley</i> —Dutch Hill, an extension of the Appalachian Plateau. <i>Lit. Cit.</i> (6, p. 113).	Utica East—1955 $7\frac{1}{2}'$ —1:24,000 Ilion—1943 $7\frac{1}{2}'$ —1:24,000
171	Wayne	ARO—8DD 7(8)9	1963	4	<i>Lake Ontario Plain</i> —Glacial lake bed; drumlins; marshland. <i>Lit. Cit.</i> (6, p. 115).	Palmyra—1899 $15'$ —1:62,500 Rochester—1944 1:250,000
172	Franklin	CXE—2CC 48(49)50	1962	3	<i>Adirondack Mts.</i> —Northward sloping foothills; glaciated.	Long Lake—1955 $15'$ —1:62,500 Saint Regis—1955 $15'$ —1:62,500
173	Niagara	ARE—1V 12(13)14	1958	3	<i>Niagara Falls and Gorge</i> —Glacial drainage channel. <i>Lit. Cit.</i> (1, pp. 222–224).	Niagara Falls—1948 $7\frac{1}{2}'$ —1:24,000 Niagara Falls—1900 $15'$ —1:62,500
174	Niagara	ARE—1V 17(18)19	1958	3	<i>Niagara Escarpment</i> —Belt of sloping upland; steep scarp slope. <i>Lit. Cit.</i> (1, pp. 458–459).	Lewiston—1948 $7\frac{1}{2}'$ —1:24,000 Ransomville—1948 $7\frac{1}{2}'$ —1:24,000
175	Ontario	ARP—6DD 130, 131(132, 133) 134, 135	1963	3	<i>Finger Lake</i> —Small, pre-glacial river valley.	Canandaigua Lake—1951 $7\frac{1}{2}'$ —1:24,000 Middlesex—1943 $7\frac{1}{2}'$ —1:24,000
176	Greene	EFD—3V 22(23)24	1959	2	<i>Catskill Mountains</i> —“Biscuit-board” topography.	Phoenicia—1900 $15'$ —1:62,500 Binghamton—1944 1:250,000
177	Suffolk	ASA—4AA 115(116)117	1961	5	<i>Ronkonkoma Moraine and Outwash Plain</i> —Terminal moraine and a sand and gravel plain. <i>Lit. Cit.</i> (3, pp. 15–19).	Setauket—1956 $15'$ —1:62,500 Patchogue—1956 $7\frac{1}{2}'$ —1:24,000
<b>NORTH CAROLINA</b>						
178	Watauga	CSC—6B 195(196)197	1940	4	<i>Blue Ridge</i> —Broad mountain massif; land use patterns. <i>Lit. Cit.</i> (6, p. 268).	Blowing Rock—1933 $15'$ —1:62,500 Zionville (TVA)—1959 $7\frac{1}{2}'$ —1:62,500
179	Rowan	DKD—2BB 51(52)53	1960	2	<i>Middle Carolina Piedmont</i> —Rolling to hilly surface; diversified land use. <i>Lit. Cit.</i> (6, p. 269).	Charlotte—1953 1:250,000
180	Orange	AVJ—3AA 155(156)157	1960	1	<i>Triassic Lowland</i> —Lower Piedmont dissected slopes, with knobs.	Greensboro—1962 1:250,000
181	Cumberland	AOC—7AA 108(109)110	1960	4	<i>Carolina Bays</i> —Solution depressions of unknown origin. <i>Lit. Cit.</i> (5, pp. 714–715).	Roseboro—1959 $15'$ —1:62,500
182	Lenoir	ABW—4W 120(121)122	1960	All 1	<i>Terraces of the Lower Coastal Plain</i> —Level to slightly rolling plain; inadequate drainage. <i>Lit. Cit.</i> (6, p. 272).	Goldsboro—1957 $15'$ —1:62,500 Kinston—1914 $15'$ —1:62,500
183	Camden	AOI—2EE 197(198)199	1963	1	<i>Dismal Swamp</i> —Shallow basin of a marine terrace; improved drainage.	Lake Drummond—1940 $15'$ —1:62,500 Elizabeth City—1940 $15'$ —1:62,500
184	Moore	ACQ—1BB 115(116)117	1961	4	<i>Sand Hills</i> —Fall line hills, lumbering operations.	Southern Pines—1957 $15'$ —1:62,500 Jackson Springs—1957 $15'$ —1:62,500
185	Carteret	BUS—7EE 4(5)6 and BUS—7EE 12(13)14	1964	2	<i>Cape Lookout</i> —Cuspate foreland; salt marsh and sand bars.	Cape Lookout—1949 $7\frac{1}{2}'$ —1:24,000 Harkers Island—1949 $7\frac{1}{2}'$ —1:24,000
<b>OHIO</b>						
186	Athens	BBW—3W 156(157)158	1960	All 1	<i>Upper Ohio Hills</i> —Allegheny Plateau; unglaciated. <i>Lit. Cit.</i> (6, p. 138).	Athens—1961 $7\frac{1}{2}'$ —1:24,000
187	Trumbull	QG—1W 84(85)86	1959	All 1	<i>Drift Plains</i> —Slightly rolling till plains, poorly established drainage. <i>Lit. Cit.</i> (6, p. 139).	Bristolville—1960 $7\frac{1}{2}'$ —1:24,000
188	Logan	DU—2EE 113(114)115	1964	2	<i>Campbell Hill</i> —Monadnock; highest point in Ohio.	Zanesfield—1960 $7\frac{1}{2}'$ —1:24,000 Rushsylvania—1961 $7\frac{1}{2}'$ —1:24,000

## OHIO (Continued)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
189	Logan	DU—2EE 59(60)61	1964	3	Western Drift Plain—Glacial till plain; Kettles. <i>Lit. Cit.</i> (6, p. 140).	DeGraff—1961 $7\frac{1}{2}'$ —1:24,000
190	Lorain	PY—1EE 48(49)50 PY—1EE 40(41)42	1964	All 1	Glacial Lake Maumee Shoreline—Beach ridge and part of the lake plain. <i>Lit. Cit.</i> (1, pp. 213-216).	Grafton—1953 $7\frac{1}{2}'$ —1:24,000 Avon—1953 $7\frac{1}{2}'$ —1:24,000
191	Defiance	BVB—3DD 200(201)202	1963	1	Ft. Wayne Moraine—Terminal moraine. <i>Lit. Cit.</i> (3, pp. 284-285).	Hicksville—1958 $7\frac{1}{2}'$ —1:24,000 Edgerton—1961 $7\frac{1}{2}'$ —1:24,000
192	Scioto	BCT—2T 78(79)80	1957	3	Confluence of Ohio and Scioto Rivers—Cumberland Plateau and adjacent Ohio Valley.	Friendship—1949 $7\frac{1}{2}'$ —1:24,000 Portsmouth—1961 $7\frac{1}{2}'$ —1:24,000

## PENNSYLVANIA

193	McKean	APL—3V 106(107)108	1958	1	Appalachian Plateau—Unglaciated upland; oil field. <i>Lit. Cit.</i> (6, p. 117).	Bradford (CE)—1941 $15'$ —1:62,500
194	McKean	APL—3V 30(31)32	1958	1	Appalachian Plateau—Central pumping station of oil field.	Bradford (CE)—1941 $15'$ —1:62,500
195	Washington	APT—1V 57(58)59	1958	3	Western Penn. Hills—Dissected border of the Appalachian Plateau. <i>Lit. Cit.</i> (6, p. 118).	Claysville—1905 $15'$ —1:62,500 Wheeling—1935 $15'$ —1:62,500
196	Clinton	AQF—3W 159(160)161	1959	5	Appalachian Ridge and Valley Section—Central Penn.; land use patterns. <i>Lit. Cit.</i> (6, p. 119).	Howard—1921 $15'$ —1:62,500 Lock Haven—1921 $15'$ —1:62,500
197	Schuylkill	AQS—2R 98(99)100	1958	3	Strip Mines—Anthracite coal; water gap. <i>Lit. Cit.</i> (6, p. 120).	Mahanoy—1955 $15'$ —1:62,500 Tamaqua—1947 $7\frac{1}{2}'$ —1:24,000
198	Lancaster	AHG—5EE 24(25)26	1964	4	Lower Piedmont Plateau—Low ridges and hills; prominent land use patterns. <i>Lit. Cit.</i> (6, p. 121).	Wakefield—1955 $7\frac{1}{2}'$ —1:24,000 Quarryville (CE)—1940 $15'$ —1:62,500
199	Perry	AHH—1DD 42(43)44 and 45(46)47	1963	1	Susquehanna River Water Gaps—2 gaps; glacial spillway.	Harrisburg West (CE)—1947 $7\frac{1}{2}'$ —1:24,000
200	Erie	APD—9V 52(53)54 East APD—14V 15(16)17 Central APD—11V 131(132)133 West	1959	2	Presque Isle—Sand and gravel hook of large size. <i>Lit. Cit.</i> (1, pp. 224, 226).	Erie North—1957 $7\frac{1}{2}'$ —1:24,000
201	Blair	AQH—3V 50(51)52	1958	All 1	Allegheny Front—Sharply defined eastern border of the Allegheny plateau.	Altoona—1902 $15'$ —1:62,500 Hollidaysbury—1902 $15'$ —1:62,500
202	Lebanon	AHN—1DD 148(149)150	1963	1	Lebanon Valley—Portion of the Great Valley; southern slope of Blue Mountain.	Lebanon—1955 $7\frac{1}{2}'$ —1:24,000
203	Clarion	APH—4V 43(44)45	1958	3	Allegheny Plateau—Maturely dissected peneplain surface	Clarion—1906 $15'$ —1:62,500 Tionesta—1922 $15'$ —1:62,500

## RHODE ISLAND

204	Newport	DPI—6H 13 through 120	1951	All 1	Block Isle—Extension of the Atlantic Coastal cuesta terminal moraine and out wash plain	Block Island—1957 $7\frac{1}{2}'$ —1:24,000
205	Providence	DPJ—5H 98(99)100	1951	All 1	Jerimoth Hill—Monadnock on glaciated plain; highest point in Rhode Island	East Killingly—1955 $7\frac{1}{2}'$ —1:24,000

## SOUTH CAROLINA

206	Berkeley	BQN—4EE 163(164)165	1963	1	Coastal Flatwoods—Lower terrace of the Coastal Plain; old shore lines. <i>Lit. Cit.</i> (6, p. 265).	Moncks Corner—1958 $7\frac{1}{2}'$ —1:24,000
207	Sumter	PK—2EE 10(11, 12)13	1964	1	Middle Coastal Plain—Large Carolina Bay. <i>Lit. Cit.</i> (6, p. 266).	Eastover—1943 $15'$ —1:62,500 Sumter—1957 $15'$ —1:62,500
208	Spartanburg	ATB—5AA 31(32)33	1960	1	Upper Piedmont—Rolling-to-hilly land bordering the Appal. Mts. <i>Lit. Cit.</i> (6, p. 267).	Spartanburg—1953 1:250,000

SOUTH CAROLINA (*Continued*)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
209	Pickens	GM—5AA 137(138)139	1960	All 1	<i>Blue Ridge</i> —Linear ridges with narrow valleys	Eastatoe Gap (TVA)—1946 $7\frac{1}{2}'$ —1:24,000
210	Richland	ATA—5AA 53(54)55	1960	2	<i>Sand Hills</i> —Fall line hills	Hopkins (CE)—1943 $15'$ —1:62,500
211	Sumter	PK—1EE 86(87)88	1964	2	<i>Red Hills</i> —Portion of the fall line zone adjacent to the Coastal Plain.	Eastover—1943 $15'$ —1:62,500 Ellerbee (CE)—1943 $15'$ —1:62,500
212	Bamberg	OT—5DD 169(170)171	1963	3	<i>Coastal Plain</i> —Flat surfaced lowland; dissected.	Bamberg (CE)—1941 $15'$ —1:62,500
213	Beaufort	CDU—1AA 112(113)114	1960	5	<i>Littoral Features</i> —Island reef; tidal inlet and spit.	Ft. Fremont (CE)—1939 $15'$ —1:62,500 Bluffton (CE)—1941 $15'$ —1:62,500
214	Sumter	PK—1EE 22(23)24	1964	2	<i>Carolina Bays</i> —Drained and cultivated bays; many are marshy.	Eastover—1943 $15'$ —1:62,500 Sumter—1957 $15'$ —1:62,500
215	Sumter	PK—4EE 165(166)167	1964	2	<i>Field of Carolina Bays</i> —Small bays, suggesting a chain pattern.	Eastover—1943 $15'$ —1:62,500 Sumter—1957 $15'$ —1:62,500

## TENNESSEE

216	Gibson	ADO—4AA 20(21)22	1960	1	<i>Coastal Plain</i> —Upland area between the Miss. and Tenn. River Valleys. <i>Lit. Cit.</i> (6, p. 247).	Humboldt—1959 $7\frac{1}{2}'$ —1:24,000 Medina—1959 $7\frac{1}{2}'$ —1:24,000
217	Williamson	AALJ—2DD 169(170)171	1963	1	<i>Nashville Basin</i> —Basin lowland with scattered knobs; intensive cultivation. <i>Lit. Cit.</i> (6, p. 248).	Columbia—1956 $1:250,000$
218	De Kalb	AES—3V 176(177)178	1959	All 1	<i>Nashville Basin Border</i> —Transition zone between the Nashville Basin and the Highland Rim. <i>Lit. Cit.</i> (6, p. 249).	Gordonsville—1926 $15'$ —1:62,500
219	Cocke	ANS—7W 186(187)188	1960	All 1	<i>Southern Appalachians</i> —Narrow, steep-sloped ridges and valleys; forest predominates. <i>Lit. Cit.</i> (6, p. 250).	Neddy Mtn. (TVA)—1940 $7\frac{1}{2}'$ —1:24,000
220	Hamilton	BSX—3V 13(14)15	1958	All 1	<i>East Tennessee Valley</i> —Southern division of the great Appalachian Valley <i>Lit. Cit.</i> (6, p. 251).	Ooltewah (TVA)—1940 $7\frac{1}{2}'$ —1:24,000
221	Coffee	AKY—6T 41(42)43	1958	All 1	<i>The Barrens</i> —Western section of the Eastern Highland Rim.	Hillsboro (TVA)—1953 $7\frac{1}{2}'$ —1:24,000
222	Marshall	ALC—1DD 165(166)167	1963	1	<i>The Knobs</i> —Remnants of an old peneplain surface deeply dissected.	Lewisburg (TVA)—1949 $7\frac{1}{2}'$ —1:24,000
223	Sequatchie	BTD—2V 130(131)132	1959	All 1	<i>Sequatchie Valley</i> —An axial valley forming a cove, bounded by steep escarpments (Walden Ridge).	Daus (TVA)—1946 $7\frac{1}{2}'$ —1:24,000 Mt. Airy (TVA)—1946 $7\frac{1}{2}'$ —1:24,000

## VIRGINIA

224	Northampton	ANP—4T 185(186)187	1957	All 1	<i>Coastal Plain</i> —Delmarva Peninsula marine terraces. <i>Lit. Cit.</i> (6, p. 127).	Cheriton—1955 $7\frac{1}{2}'$ —1:24,000 Franktown—1943 $7\frac{1}{2}'$ —1:24,000
225	Norfolk	DGF—1V 213(214)215	1958	All 1	<i>Lower Coastal Plain</i> —Mainland; improved drainage. <i>Lit. Cit.</i> (6, p. 128).	Kempsville—1955 $7\frac{1}{2}'$ —1:24,000 Cape Henry—1918 $15'$ —1:62,500
226	Campbell	DHG—2W 182(183)184	1959	1	<i>Upper Piedmont</i> —Hilly upland; strip cutting of timber. <i>Lit. Cit.</i> (6, p. 129).	Lynchburg—1950 $15'$ —1:62,500
227	Roanoke	DTS—1CC 208(209)210	1962	2	<i>Catawba Mountain and Valley</i> —Part of the Blue Ridge and broad valley. <i>Lit. Cit.</i> (6, p. 130).	Salem—1929 $15'$ —1:62,500
228	Patrick	ELM—3DD 106(107)108	1963	3	<i>Rim of Blue Ridge Plateau</i> —Contact between the Blue Ridge Plateau and the lower, detached mountains and valleys. <i>Lit. Cit.</i> (6, p. 131).	Mt. Airy—1957 $15'$ —1:62,500 Stuart—1928 $15'$ —1:62,500
229	Pittsylvania	DGG—10DD 9(10)11	1963	4	<i>Triassic Lowlands</i> —Fault line zone; old age topography. <i>Lit. Cit.</i> (I, pp. 116-117).	Danville—1923 $15'$ —1:62,500
230	Fauquier	DJD—5T 77(78)79	1958	1	<i>Manassas Gap</i> —Wind gap through the Blue Ridge. <i>Lit. Cit.</i> (I, pp. 130-131).	Upperville—1943 $7\frac{1}{2}'$ —1:24,000 Orlean—1943 $7\frac{1}{2}'$ —1:24,000

VIRGINIA (*Continued*)

No.	County	County Symbol, Roll, Exposures	Photo Date	Index Sheet No.	Description of Features	U.S.G.S. Quadrangle Map Coverage
231	Lee	CYI—2CC 20(21)22	1962	3	<i>Cumberland Mountains and Gap</i> —Eroded remnants of an overthrust block fault, water gap.	Middlesboro South (TVA)—1959 $7\frac{1}{2}'$ —1:24,000
232	Lancaster	DVX—1AA 45(46, 47)48	1961	All 1	<i>Littoral Features</i> —Wave-end cliff; features of submergence.	Kilmarnock—1916 $15'$ —1:62,500 Fleets Bay—1946 $7\frac{1}{2}'$ —1:24,000

## WEST VIRGINIA

233	Jefferson	AGW—1P 79(80)81	1955	All 1	<i>Shenandoah Valley</i> —Part of the Great Valley, intensive cultivation. <i>Lit. Cit.</i> (6, p. 132).	Harpers Ferry—1955 $7\frac{1}{2}'$ —1:24,000
234	Kanawha	AMD—6R 64(65)66	1957	2	<i>Appalachian Plateau</i> —Dissected, rugged upland; forests predominate. <i>Lit. Cit.</i> (6, p. 133).	Peytona—1929 $15'$ —1:62,500 Charleston West—1958 $7\frac{1}{2}'$ —1:24,000
235	Greenbrier	DZD—2R 178(179) and DZD—9R—102	1957	3	<i>Yew Mountain</i> —Ridge of the Cumberland Mts. and adjacent valley; sink holes.	White Sulphur Springs—1935 $15'$ —1:62,500
236	Monongalia	AMX—4M 13(14)15	1953	All 1	<i>Incised Meanders</i> —Monongahela River, an antecedent stream.	Morgantown North—1957 $7\frac{1}{2}'$ —1:24,000 Morgantown South—1957 $7\frac{1}{2}'$ —1:24,000
237	Grant	AGT—1DD 212(213)214	1963	2	<i>Allegheny Front</i> —Well-defined escarpment forming the eastern border of the Allegheny Plateau.	Davis—1919 $15'$ —1:62,500 Mount Storm—1949 $7\frac{1}{2}'$ —1:24,000
238	Pocahontas	DZK—2R 42(43)44	1957	1	<i>Allegheny Mountains</i> —High, plateau-like mountains. <i>Lit. Cit.</i> (3, pp. 284—290).	Mingo—1923 $15'$ —1:62,500
239	Pendleton	DPW—1T 11(12)13	1959	2	<i>Potomac River and Valley</i> —Allegheny Mts. area.	Oneo—1920 $15'$ —1:62,500
240	Grant	AGT—1DD 174(175)176	1963	1	<i>Wind and Water Gaps</i> —Cut through a broad ridge of the Allegheny Mountains.	Greenland Gap—1919 $15'$ —1:62,500

## WISCONSIN

241	Waukesha	WW—1DD 250(251)252	1963	2	<i>Dairy Region</i> —Rolling drift plain; wet lowlands. <i>Lit. Cit.</i> (6, p. 149).	Oconomowoc East—1959 $7\frac{1}{2}'$ —1:24,000
242	Jefferson	WV—1DD 78(79)80	1963	1	<i>Drumlin Field</i> —Large drumlins, controlling land use patterns. <i>Lit. Cit.</i> (6, p. 150).	Waterloo—1959 $15'$ —1:62,500 Watertown—1959 $15'$ —1:62,500
243	Grant	CI—2BB 192(193) and BHP—2BB—194	1961	1	<i>Military Ridge</i> —Smooth-crested escarpment driftless area of Southwestern Wisconsin. <i>Lit. Cit.</i> (6, p. 151).	Boscobel—1931 $15'$ —1:62,500
244	Douglas	BRS—1V 14(15)16	1958	6	<i>Sandy Outwash Plain</i> —Pitted, rolling plain; marshy depressions. <i>Lit. Cit.</i> (6, p. 152).	Patzau—1955 $15'$ —1:62,500 Webb Lake—1955 $15'$ —1:62,500
245	Douglas	BRS—4V 73(74)75	1958	1	<i>Ore-loading Docks</i> —Duluth and Superior ports; Lake Superior.	Duluth-Superior and Vicinity—1954 $15'$ —1:62,500
246	Ashland	BRN—12G 78(79)80	1951	1	<i>Madeline Island</i> —Drowned extension of Bayfield Peninsula; cut-off bays, wave-cut cliffs, and a marine terrace.	Ashland—1953 1:250,000
247	Sauk	WR—4CC 83(84)85	1962	2	<i>Baraboo Range and Devil's Lake</i> —Example of resurrected mountains. <i>Lit. Cit.</i> (3, pp. 461—462).	Baraboo—1959 $15'$ —1:62,500 North Freedom—1958 $15'$ —1:62,500
248	Sauk	WR—4CC 58(59)60	1962	1	<i>The Dells</i> —Area of entrenchment in horizontal sandstone layers; glacial river channels.	Wisconsin Dells—1957 $15'$ —1:62,500
249	Adams	AJA—2T 37(38)39	1957	3	<i>Sandy Plains</i> —Scattered mesa on butte-like remnants.	Briggsville—1957 $15'$ —1:62,500