

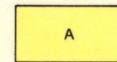
Base from U.S. Geological Survey  
state base maps, scale 1:500,000

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10419

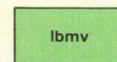
Soils by W. H. Lyford, 1953-54

EXPLANATION

**ALLUVIAL SOILS AND SOLS BRUNS ACIDES**  
Include small isolated areas of Podzols, Low Humic-Gley, Humic-Gley, and Organic soils; developed on alluvium of Recent age; Sols Bruns Acides occur on low terraces and alluvial fans bordering flood plains



**Tioga-Barbour-Chenango-Tunkhannock association**  
Medium- and moderately coarse textured soils lacking prominent textural B horizons. Reddish Tunkhannock and Barbour soils in valleys adjacent to Lackawanna soils on uplands



**Lordstown-Bath-Mardin-Volusia association**  
Medium-textured gravelly or channery, strongly acid soils developed chiefly on grayish till and colluvium of Wisconsin age; occur on gently sloping or sloping land; locally include small areas of slightly acid Langford and Erie soils



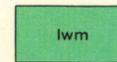
**Lordstown association**  
Same as Lordstown-Bath-Mardin-Volusia association, but found chiefly on steep valley walls

**PODZOLS AND SOLS BRUNS ACIDES**

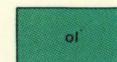
Include small isolated areas of Low Humic-Gley and Humic-Gley soils north of Wisconsin drift border; include small isolated areas of Red-Yellow Podzolic and Gray-Brown Podzolic soils south of Wisconsin drift border



**Leetonia-DeKalb association**  
Coarse- to medium-textured gravelly, channery, or stony soils on colluvium, residuum, drift, or mixtures of these deposits. Occur chiefly on plateau tops underlain by gray coarse-grained sandstone or conglomerate



**Lackawanna-Wellsboro-Morris association**  
Medium-textured gravelly or channery, strongly acid soils; developed on reddish till or colluvium of Wisconsin age; occur chiefly on gently sloping or sloping land



**Oquaga-Lackawanna association**  
Medium-textured channery soils developed on reddish parent materials, occur chiefly on steep valley walls both north and south of the Wisconsin drift border

**RED-YELLOW PODZOLIC SOILS**

Include small isolated areas of Sols Bruns Acides and Low Humic-Gley soils



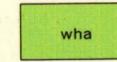
**Allenwood association**  
Chiefly medium-textured gravelly or channery soils on yellowish-red strongly weathered drift, colluvium, or alluvium of pre-Wisconsin age

**GRAY-BROWN PODZOLIC SOILS**  
Include small isolated areas of Sols Bruns Acides and Low Humic-Gley soils

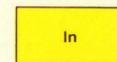


**Howard association**  
Medium-textured gravelly soils with prominent textural B horizons; developed on glaciofluvial deposits of Wisconsin age

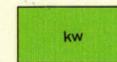
**SOLS BRUNS ACIDES, GRAY-BROWN PODZOLIC, AND RED-YELLOW PODZOLIC SOILS**



**Weikert-Hartleton-Allenwood association**  
Chiefly medium-textured gravelly or channery soils on grayish- or yellowish-red colluvium, residuum, drift, or mixtures of these deposits



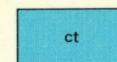
**Lansing-Nunda association**  
Medium-textured grayish soils; occur chiefly on gently sloping land within prominent segments of the Valley Heads moraine



**Klinesville-Weatherly association**  
Same as Weikert-Hartleton-Allenwood association except that parent materials are reddish

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Border of Wisconsin drift

**SOL BRUNS ACIDES AND LOW HUMIC-GLEY SOILS**  
Occur on drift and colluvium of Wisconsin age, chiefly in area north of Wisconsin drift border; include small isolated areas of Podzols and Humic-Gley soils; only Sols Bruns Acides occur on steep valley walls



**Chenango-Tunkhannock association**  
Medium-textured gravelly soils lacking prominent textural B horizons; developed on glaciofluvial deposits of Wisconsin age. Tunkhannock soils are commonly associated with Lackawanna soils

MAP SHOWING GREAT SOIL GROUPS AND SOIL ASSOCIATIONS OF THE ELMIRA-WILLIAMSPORT REGION,  
NEW YORK AND PENNSYLVANIA

SCALE 1:500 000

