



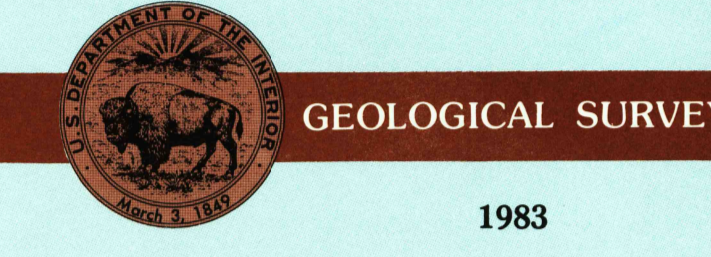
Warren

PENNSYLVANIA - NEW YORK
1:100 000-scale metric
topographic map



30 X 60 MINUTE QUADRANGLE SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



Produced by the United States Geological Survey
 Compiled from USGS 1:24 000-scale topographic maps dated 1966-1967. Planimetry revised from aerial photographs taken 1981 and other source data. Revised information not field checked. Map edited 1983.

Projection and 10 000-meter grid, zone 17: Universal Transverse Mercator. 25 000-foot grid ticks based on Pennsylvania coordinate system, north zone, 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 2 meters south and 20 meters west. There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 20 METERS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	M	G	1	2	3
1	3.2808		14.2	1	2	3
2	6.5617			4	5	
3	9.8425			6	7	
4	13.1234			8	9	
5	16.4042			10		
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5275					
10	32.8084					

To convert meters to feet multiply by 3.2808
 To convert feet to meters multiply by 0.3048

UTM grid convergence (GN) and true magnetic declination (MM) at center of map. Diagram is approximate.

1 Erie
2 Allegheny
3 Oil City
4 Crawford

FOR SALE BY U. S. GEOLOGICAL SURVEY
 RESTON, VIRGINIA 22092

Topographic Map Symbols

Primary highway, hard surface	
Secondary highway, hard surface	
Light duty road, principal street, hard or improved surface	
Other road or street; soil	
Route marker; Interstate; U. S.; State	
Railroad; standard gage; narrow gage	
Bridge; overpass; underpass	
Tunnel; road; railroad	
Built up area; locality; elevation	
Airport; landing field; landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U. S. public lands survey; range, township; section	
Range, township; section line; protracted	
Power transmission line; pipeline	
Dam; dam with lock	
Cemetery; building	
Washbasin; water well; spring	
Moss chart; site of cave; mine, quarry; gravel pit	
Campground; picnic area; U. S. location monument	
Ruin; cliff dwelling	
Distorted surface; strip mine, lava, sand	
Contours; index; intermediate; supplementary	
Barometric contours; index; intermediate	
Stream, lake; perennial; intermittent	
Rapids, large and small; falls, large and small	
Area to be submerged; marsh, swamp	
Land subject to controlled inundation; woodland	
Sorb; mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request