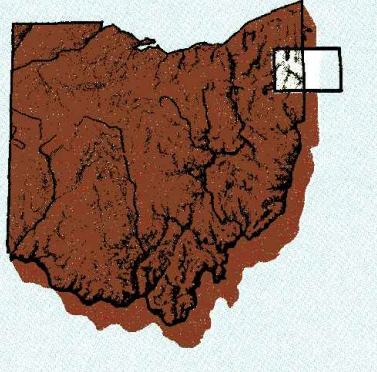


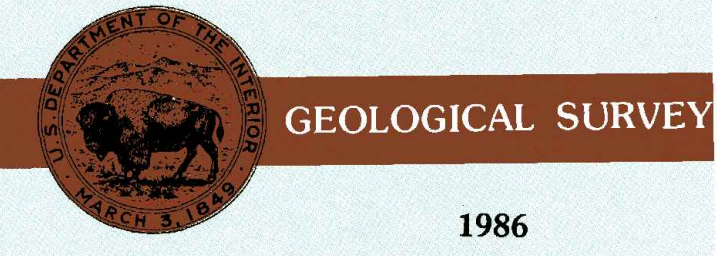
Youngstown OHIO-PENNSYLVANIA

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



1986

Produced by the United States Geological Survey
 Compiled from USGS 1:24 000-scale topographic maps dated 1952-1981. Planimetry revised from aerial photographs taken 1982-83 and other source data. Revised information not field checked. Map edited 1986.
 Projection and 10 000-meter grid, zone 17, Universal Transverse Mercator
 north zone and Pennsylvania coordinate system, north and south zones
 1927 North American Datum
 To place on the predicted North American Datum 1983, move the projection lines 2 meters south and 17 meters west.
 There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 10 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	1983	1986	1	2	3	4
1	3.2808	12.87	12.86	1	2	3	4
2	6.5616	25.74	25.72	5	6	7	8
3	9.8424	38.61	38.59				
4	13.1232	51.48	51.46				
5	16.4040	64.35	64.33				
6	19.6848	77.22	77.20				
7	22.9656	90.09	89.97				
8	26.2464	102.96	102.84				
9	29.5272	115.83	115.71				
10	32.8080	128.70	128.58				

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

UTM grid convergence (GM) and 1986 magnetic declination (MD) at center of map
 Diagram is approximate

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Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light duty road, principal street, hard or improved surface
- Other road or street, trail
- Route marker: Interstate, U.S. State
- Railroad: standard gage, narrow gage
- Bridge: overpass, underpass
- Tunnel, road, railroad
- Built up areas, 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: protected
- Power transmission line; pipeline
- Dam, dam with lock
- Conspicuous building
- Windmill; water well; spring
- Mine shaft; adit or 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
- Bathymetric 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
- Swamp, bog
- Orchard; vineyard

A pamphlet describing topographic maps is available on request