

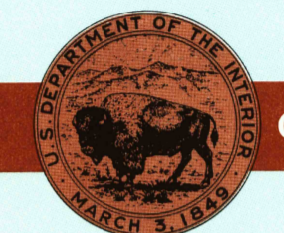
Munising MICHIGAN

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



GEOLOGICAL SURVEY

1983

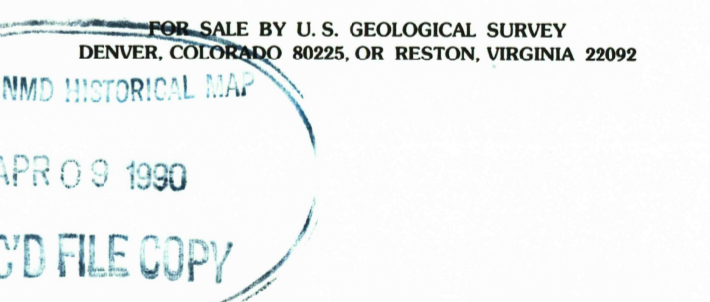
Produced by the United States Geological Survey
 Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1958-1972. Planimetry revised from aerial photographs taken 1981 and other source data. Revised information not field checked. Map edited 1983.
 Projection and 10 000-meter grid, zone 16, Universal Transverse Mercator.
 25 000-foot grid ticks based on Michigan coordinate system, north zone.
 1927 North American Datum.
 To place on the predicted North American Datum 1983, move the projection lines 7 meters north and 6 meters east.
 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	Miles		1	2	3
1	3.2808	3"		4	5	
2	6.5617	3"		6	7	8
3	9.8425	3"				
4	13.1234	3"				
5	16.4042	3"				
6	19.6850	3"				
7	22.9659	3"				
8	26.2467	3"				
9	29.5276	3"				
10	32.8084	3"				

UTM grid convergence (GN) and 1983 magnetic declination (MN) at center of map. Diagram is approximate.



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 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
- Windmill; water well; spring
- Mine shaft; adit or cave; mine, quarry; gravel pit
- Campground; picnic area; U.S. location monument
- Ruin; cliff dwelling
- Disturbed 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
- Shrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request

