

# Ontonagon 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

1979 PHOTOINSPECTED 1988

Produced by the United States Geological Survey  
 Compiled from USGS 1:24 000 and 1:25 000-scale topographic maps dated 1956-1982. Planimetry revised from aerial photographs taken 1975 and other source data. Revised information not field checked. Map edited 1979  
 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 6 meters north and 9 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

Map photoinspected using 1986 and 1988 photographs  
 No major culture or drainage changes found

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	Magnetic Declination		1	2	3
1	3.2808	1987		4	5	
2	6.5617	1979		6	7	8
3	9.8425	1971				
4	13.1234	1963				
5	16.4042	1955				
6	19.6850	1947				
7	22.9659	1939				
8	26.2467	1931				
9	29.5275	1923				
10	32.8084	1915				

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

UTM grid convergence (GM) and 1979 magnetic declination (MD) at center of map  
 Diagram is approximate

1 Outer Island  
 2 Hancock  
 3 Ashland  
 4 Ironwood  
 5 Ironwood  
 6 Ironwood  
 7 Wakefield  
 8 Iron River

FOR SALE BY U. S. GEOLOGICAL SURVEY  
 DENVER, COLORADO 80225, OR 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; trail
- Route marker: Interstate, U.S., State
- Railroad: standard gage; narrow gage
- Bridge: overpass; underpass
- Built up area: locality, elevation
- Airport: landing field; landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary: range, township, section
- Range, township, section line: protracted
- Power transmission line: pipeline
- Dam: dam with lock
- Cemetery: building
- Windmill; water well; spring
- Mine shaft; set or cave; mine, quarry; gravel pit
- Census route; U.S. location monument
- Ruins; 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 salinized; marsh, swamp
- Land subject to controlled inundation; woodland
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request



SCALE 1:100 000  
 1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND  
 1 INCH ON THE MAP REPRESENTS 25,000 FEET ON THE GROUND

ONTONAGON, MICHIGAN 46089-E1-TM-100  
 1979 PHOTOINSPECTED 1988

JAN 1982