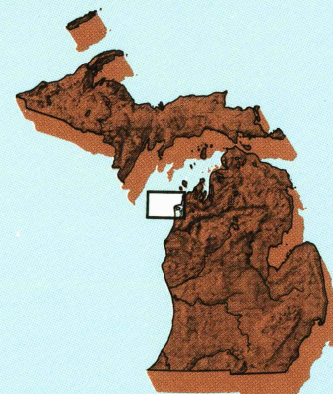


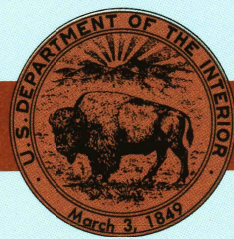
PHOTOINSPECTED 1022

**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

1984
PHOTOINSPECTED 1988

Produced by the United States Geological Survey

Compiled from USGS 1:62 500-scale topographic maps dated 1956-1957. Planimetry revised from aerial photographs taken 1977 and other source data. Revised information not field checked. Map edited 1984

Projection and 10 000-meter grid, zone 16,

Universal Transverse Mercator
25 000-foot grid ticks based on Michigan coordinate

system, central zone

To place on the predicted North American Datum 1

the projection lines 4 meters north and 3 meters east

There may be private inholdings within the boundaries of the National or State reservations shown on this map.

Map photoinspected using 1986 and 1988 photographs

CONTour INTERVAL 10 METERS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS			
Meters	Feet			1	2	3	4
1	3.2808						
2	6.5617						5
3	9.8425						
4	13.1234						
5	16.4042						
6	19.6850						
7	22.9659						6
8	26.2467						7
9	29.5275						8
10	32.8084						
To convert meters to feet multiply by 3.2808		UTM grid convergence (GN) and 1984 magnetic declination (MN) at center of map Diagram is approximate		1 Marinette 2 Washington Island 3 Charlevoix 4 Sturgeon Bay 5 Traverse City 6 Manitowish 7 Manistee 8 Cadillac			
To convert feet to meters multiply by 0.3048							

FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22091

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
Rock material: 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
Neared 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
Cemetery; building
Windmill; water well; spring
Mine shaft; adit or cave; mine; quarry; gravel pit
Camargued; picnic area; U.S. location monument
Point; ship; 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
Swamp, mangrove
Orchard; vineyard

A pamphlet describing topographic maps is available on request.