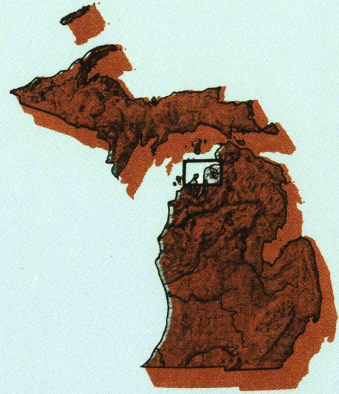


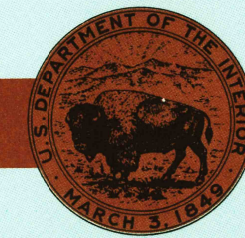
Charlevoix
MICHIGAN

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

1984
PHOTOINSPECTED 1986

Produced by the United States Geological Survey

Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1954-1983. Planimetry revised from aerial photographs taken 1981 and other source data. Revised information not field checked. Map edited 1984

Projection and 10 000-meter grid, zone 16, Universal Transverse Mercator
To place on the predicted North American Datum 1983, move the projection lines 3 meters north and 3 meters east


1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 3 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 photographs
No major culture or drainage changes found

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		1	2	3	4	5
1	3.2808		1	2	3	4	5
2	6.5617		6	7	8		
3	9.8425						
4	13.1234						
5	16.4042						
6	19.6850						
7	22.9659						
8	26.2467						
9	29.5275						
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	2	3	4	5
To convert feet to meters multiply by 0.3048			6	7	8		
			1	2	3	4	5
			6	7	8		

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

USGS MMD HISTORICAL MAP

MAR 02 1990

REC'D FILE COPY

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 gauge, narrow gauge	Bridge: overpass, underpass	Tunnel: road, railroad	Built up area, locality, elevation	Airport, landing field, landing strip	National 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	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 submerged; marsh, swamp	Land subject to controlled inundation; woodland	Scrub; mangrove	Orchard; vineyard
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A pamphlet describing topographic maps is available on request

