



South Bend

INDIANA-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
PHOTOINSPECTED 1988

Produced by the United States Geological Survey
Compiled from USGS 1:24 000-scale topographic maps dated 1945-1980. Planimetry revised from aerial photographs taken and other source data. Revised information not field checked 1980 Map edited 1983
Projection and 10 000-meter grid, zone 16: Universal Transverse Mercator. 25 000-foot grid ticks based on Michigan coordinate system, south zone and Indiana coordinate system, east and west zones. 1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 1 meter north and 2 meters east
There may be private inholdings within the boundaries of the National or State reservations shown on this map
Map photinspected using 1986-1988 photographs
No major culture or drainage changes found

CONTOUR INTERVAL 5 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE	
Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9658
8	26.2467
9	29.5275
10	32.8084

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

DECLINATION DIAGRAM

ADJOINING MAPS

1	2	3
4	5	6
7	8	

- 1 Waskegan
- 2 Berrien Harbor
- 3 Kalamazoo
- 4 Chicago
- 5 Elkhart
- 6 Kankakee
- 7 Rome
- 8 Fort Wayne

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

USGS 1:100 000 MAP ARCHIVES
DEC 3 0 1991

Topographic Map Symbols

Primary highway, hard surface	Secondary highway, hard surface
Light duty road, gravel 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; building; 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	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, low, sand	Contours: index; intermediate; supplementary
Stream, lake: perennial; intermittent	Rapid; large and small; falls, large and small
Area to be submerged; marsh; swamp	Land subject to controlled inundation; woodland
Stock; mangrove	Orchard; vineyard

A pamphlet describing topographic maps is available on request

