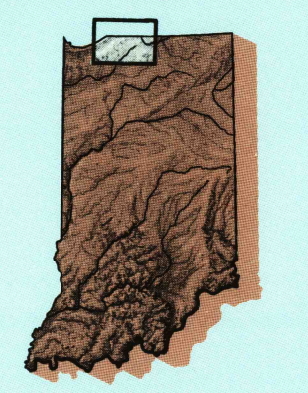


South Bend

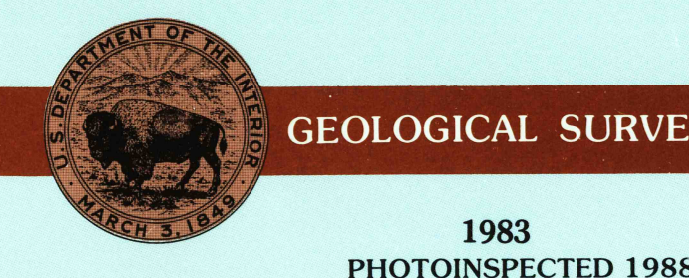
INDIANA-MICHIGAN

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



Produced by the United States Geological Survey
Compiled from USGS 1:250 000-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 photoinsppected 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	22.9659
8	26.2467
9	29.5275
10	32.8084

DECLINATION DIAGRAM

ADJOINING MAPS

1	2	3
1	2	3
4	5	6
7	8	9

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

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

1 Wakarusa
2 Berrien Harbor
3 Adams
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 30 1991

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, building, direction
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
Cemetery index; intermediate, supplementary
Bathymetric contours: index; intermediate
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, manure
Orchard; vineyard

A pamphlet describing topographic maps is available on request