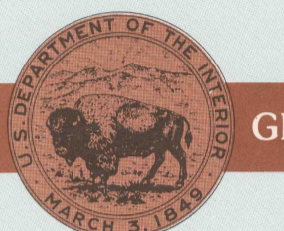


30 X 60 MINUTE QUADRANGLE SHOWING

- Elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



GEOLOGICAL SURVEY

1984

Produced by the United States Geological Survey
 Compiled from USGS 1:24 000-scale topographic maps dated 1953-1983. Planimetry revised from aerial photographs taken 1963 and other source data. Revised information not field checked. Map edited 1984.
 Projection and 10 000-meter grid, zone 15, Universal Transverse Mercator
 25 000-foot grid ticks based on Iowa coordinate system, south and north zones
 1927 North American Datum
 To place on the predicted North American Datum 1983, move the projection lines 3 meters north and 13 meters east.
 There may be private inholdings within the boundaries of the National or State Reservations shown on this map.

NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929

ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

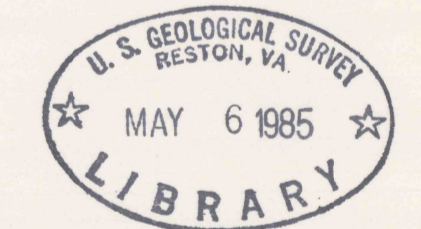
CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	Diagram showing magnetic declination (MN) and true north (GN) with a 1° 10' 18" difference.		1	2	3
1	3.2808			4	5	
2	6.5617			6	7	8
3	9.8425					
4	13.1234					
5	16.4042					
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5275					
10	32.8084					

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

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

1	Marshalltown
2	Assamona
3	Dubique South
4	Grinnell
5	Davenport
6	Oskaloosa
7	Muscatine
8	Albia

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80221 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 gauge; narrow gauge	
Bridge: overpass; underpass	
Tunnel: road; railroad	
Ball up area; landing elevation	
Airport: landing field; landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundaries	
U.S. public lands survey: range, township; section	
Range, township; section line: protruded	
Power transmission line; pipeline	
Dam; dam with lock	
Cemetery: building	
Well: water well; spring	
Mine shaft; adit or cave; mine, quarry; gravel pit	
Campground; picnic area; U.S. location monument	
Ruin; cliff dwelling	
Distorted surface: strip mine, lava; sand	
Contour: 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	
Struck, man-made	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request

