

Grinnell

IOWA

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

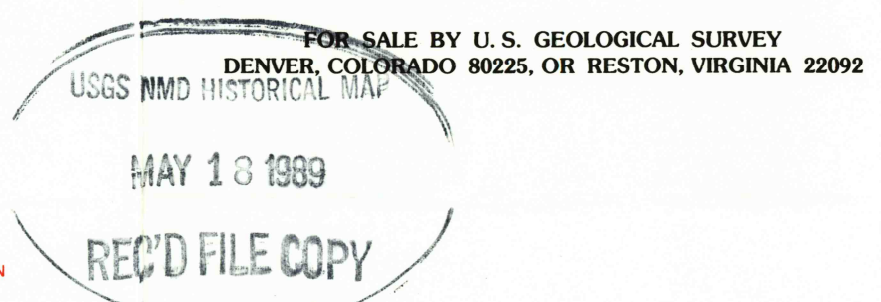
1984

Produced by the United States Geological Survey
Compiled from USGS 1:24 000-scale topographic maps dated 1965-1980. 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 15 meters east.
There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 10 METERS
SUPPLEMENTARY 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		DECLINATION DIAGRAM	ADJOINING MAPS			
Meters	Feet		1	2	3	
1	3.2808		1	2	3	
2	6.5617		4	5		
3	9.8425					
4	13.1234					
5	16.4042					
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5276					
10	32.8084					
To convert meters to feet multiply by 3.2808		UTM grid convergence (GN and 1984 magnetic declination 1984) at center of map Diagram is approximate	1 Ames	2 Marshalltown	3 Ankeny	
To convert feet to meters multiply by 0.3048			4 Des Moines	5 Iowa City	6 Indianola	
			7 Okaloosa	8 Muscatine		



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	
State boundary	
County boundary	
National or State reservation 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 open 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	

A pamphlet describing topographic maps is available on request

GRINNELL, IOWA
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